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Predictors of Faculty Intentions to Refer Students with Mental Health Concerns to Mental Health Professionals

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Predictors of Faculty Intentions to Refer Students with Mental Health Concerns to Mental Health Professionals

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Abstract

College students' mental health has become a crucial issue in recent years after the violent acts at Columbine High School, Virginia Tech University, and Northern Illinois University (Kraft, 2011). The National College Health Assessment conducted by the American College Health Association found that one in twelve college students reported having seriously considered suicide in the previous 12 months (American College Health Association, 2014). The purpose of this quantitative study was to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. The participants were $N = 149$ faculty members at a single, Midwestern public university. The participants completed a Theory of Planned Behavior (TPB) questionnaire regarding referral-related beliefs and intentions. Data collected were analyzed using multiple linear regressions to determine if the independent variables contributed to the statistical prediction of the intention to refer students. The findings of the study revealed faculty members' attitudes, subjective norms, prior knowledge of mental health concerns, and academic discipline (math and computer science disciplines) were significant predictors of intentions to refer students with mental health concerns. Determining these predictors assist gatekeeper trainers to design curricula that will increase the likelihood of faculty to refer students with mental health concerns. Identifying and connecting students to needed mental health services will improve campus communities.

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Chapter I: Introduction

College students' mental health has become critically important in recent years after violent acts at Columbine High School, Virginia Tech University, and Northern Illinois University (Kraft, 2011). A survey conducted by the Association for University and College Counseling Center Directors found the number of students seeking counseling is continuing to increase, as is the severity of the presenting problems (Sieben, 2011). The National Survey of Counseling Center Directors found 9% of students in 1994 were taking psychiatric medications and by 2012 the numbers had increased dramatically to 24% of students (Gallagher, 2014). Counseling centers have had to learn creative ways to serve students as budgets and staffing have not grown in proportion to students' needs (Gallagher, 2014).

Several scholars report the number of college students suffering from depression and suicidal thoughts is increasing (American College Health Association, 2014; Hunt & Eisenberg, 2010). The National College Health Assessment conducted by the American College Health Association found that one in 12 college students reported having seriously considered suicide and 86% of college students felt overwhelmed in the previous 12 months (American College Health Association, 2014). Additionally, 14% of students reported being diagnosed with anxiety, 12% diagnosed with depression, 2% diagnosed with bipolar disorder, 2% diagnosed with eating disorders, 2% diagnosed with obsessive compulsive disorder, and 1% diagnosed with a substance use disorder (American College Health Association, 2014).

Researchers have shown college students with mental health concerns face many academic challenges and engagement stressors (Salzer, 2012). Eighty-six percent of college students with mental illness withdraw from college, compared to 45% for students without

mental illness (Collins & Mowbray, 2005). Results of a study by the National Alliance on Mental Illness (2012) found 64% of students with mental health problems end up withdrawing from school. Students with mental illness have lower grade point averages, face social isolation, and experience discrimination more often than students without a mental illness (Blacklock, Benson, Johnson, & Bloomberg, 2003; Eisenberg, Golberstein, & Hunt, 2009). Salzer (2012) found that students with mental illnesses were less engaged on campus and have poorer relationships, which were related to lower graduation rates.

Faculty and student interactions outside of the classroom can positively affect students' intellectual development, personal growth, learning outcomes, persistence, and degree completion (Astin, 1993; Kuh & Hu, 2001; Pascarella & Terenzini, 2005; Tinto, 1993). Despite the benefits of student interactions, some faculty have negative attitudes, lack knowledge, and have discomfort towards students with mental illnesses (Becker, Martin, Wajeeh, Ward, & Shern, 2002; Brockelman, Chadsey, & Loeb, 2006; Sniatecki, Perry, & Snell, 2015). Although a few scholars have found the majority of faculty have positive expectations for students with mental illnesses (Becker et al., 2002; Sniatecki et al., 2015), several researchers have shown faculty experiences, perceptions, attitudes, and comfort levels may be related to faculty interactions with students who have mental health concerns (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman et al., 2006). Faculty who have the potential for stigmatizing discrimination or social distancing have greater discomfort, more fearful, and less likely to help students with mental illness (Becker et al., 2002).

In response to tragic incidents on campuses and staggering research findings, higher education institutions have begun to implement campus-wide mental health promotion and

suicide prevention strategies (Kraft, 2011). One campus-wide strategy to promote student mental health is to educate campus gatekeepers about recognizing signs of mental health concerns (Wallack, Servaty-Seib, & Taub, 2013). Gatekeepers are individuals who may come in contact with persons at risk for mental health concerns and have the opportunity to identify concerning behaviors. On college campuses, gatekeepers are those who regularly connect with students, including faculty, academic advisors, deans of students, student affairs staff, and residence hall staff (Servaty-Seib et al., 2013). Gatekeeper training is focused on educating individuals to recognize signs of distress and offer referrals to mental health professionals when needed. College faculty interact with students on a daily basis and are more likely to hear from a student with mental health concerns than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, they are uniquely positioned to recognize and support students with mental health concerns. Providing gatekeeper training to faculty members can help in identifying students with mental health concerns and assisting them in receiving early mental health treatment (Yufit & Lester, 2004).

Statement of the Problem

Gatekeeper training has been shown to be effective at increasing knowledge and skills (Isaac et al., 2009; Pasco, Wallack, Sartin, & Dayton, 2012), but researchers have found knowledge and skills are not the only factors that play a role in referring students to mental health professionals (Becker et al., 2002; Lee, 2014; Schwartz, 2010; Servaty-Seib et al., 2013). Servaty-Seib et al. (2013) studied resident assistants' intentions to refer students to counseling. They found that resident assistants' intentions to refer were influenced by their beliefs related to subjective norms and their self-efficacy in making a referral. Lee (2014) studied U.S. and South

Korean K-12 teachers' intention to refer students with attention-deficit/hyperactivity disorder (ADHD) symptoms to a mental health professional. The U.S. teachers' favorable attitude, perceived approval from others, and higher self-efficacy predicted their intentions to refer. Schwartz (2010) conducted a qualitative study of faculty's intentions to respond to the acutely distressed college student. From the themes that emerged, Schwartz (2010) indicated faculty intentions were influenced by attitudes, subjective norms, and perceived behavioral control. Based on these studies, I questioned if faculty intentions to refer students to mental health professionals were influenced by their attitudes, perceived skills and abilities, the impact of other people, and/or demographic characteristics.

Purpose and Significance

The purpose of this study was to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. Prior researchers have explored resident assistants' (Servaty-Seib et al., 2013) and K-12 teachers' (Carr, 2011; Lee, 2014) referral intentions; yet, at the present, there is no literature describing faculty members referral intentions. With knowledge of these predictors, administrators can better prepare faculty to identify and refer students to seek counseling. Also, educators who train gatekeepers can use this information to develop curricula that increase the likelihood faculty gatekeepers will refer students to a mental health professional. Lastly, identifying these predictors will eventually assist college students with mental health concerns in receiving needed mental health services.

Description and Scope of Research

In this study I used a non-experimental, quantitative research design to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. I utilized an adaptation of the original Theory of Planned Behavior Questionnaire (TPB) developed by Servaty-Seib et al. (2013). Data collected was analyzed using both descriptive and inferential statistics through SPSS statistical software. The participants were full-time or part-time faculty members from a single, Midwestern public university with a Carnegie classification of Masters M.

The theory of planned behavior (TPB) developed by Ajzen (1991) provided the theoretical grounding for this study. It is a model designed to explain motivational influence on behavior (Ajzen, 1988). The TPB suggests "a person's intention to perform in a behavior is the proximal determination of performing the behavior" (Servaty-Seib et al., 2013, p. 51). According to this theory, an individual's intention to engage in a particular behavior is influenced by their (a) attitudes toward the behavior, (b) subjective norms, and (c) perceived behavioral control.

Azjen and Fishbein (1980) defined the first construct of *attitude* as "a person's general feeling of favorableness or unfavorableness" towards a certain concept (p. 54). The second construct, *subjective norm* is a person's "perception that most people who are important to him [or her] think he [or she] should or should not perform the behavior in question" (Azjen & Fishbein, 1980, p. 57). The third construct, *perceived behavioral control* is one's perception of his or her ability to perform a behavior and the ease or difficulty of the behavior in question (Azjen, 1991). As stated by Ajzen (1991), "the more favorable the attitude and the subjective

norm and the greater the perceived behavioral control, the stronger should be the individual's intention to perform the behavior under consideration" (p. 188). Providing information is not enough to change behaviors; interventions must be focused on the determinants of the behavior (attitudes, subjective norms, and perceived behavioral control) and at the salient beliefs (Ajzen & Fishbein, 2005). The TPB has been identified as one of the most used theories to explain individuals' social behaviors (Perkins et al., 2007). Further description of Ajzen's theory will occur in the following section; however, this theory provides constructs for belief-related predictors, which allowed me to draw the hypotheses.

Research Questions and Hypotheses

In this study I investigated the following research questions and hypotheses:

RQ1. What are the belief-related predictors (attitudes, subjective norms, and perceived behavioral control) of faculty members' intentions to refer students with mental health concerns to mental health professionals?

H_{o1}. There is no significant difference between faculty members' *attitudes* and intentions to refer students with mental health concerns to mental health professionals.

H_{a1}. Faculty members' *attitudes* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o2}. There is no significant difference between faculty members' *subjective norms* and intentions to refer students with mental health concerns to mental health professionals.

H_{a2}. Faculty members' *subjective norms* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o3}. There is no significant difference between faculty members' *perceived behavioral control* and intentions to refer students with mental health concerns to mental health professionals.

H_{a3}. Faculty members' *perceived behavioral control* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

RQ2. What differences exist in intentions to refer students with mental health concerns to mental health professionals based on faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race?

H_{o4}. There is no significant difference between faculty members' rank and intentions to refer students with mental health concerns to mental health professionals.

H_{a4}. Faculty members' rank will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o5}. There is no significant difference between faculty members' academic discipline and intentions to refer students with mental health concerns to mental health professionals.

H_{a5}. Faculty members' academic discipline will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o6}. There is no significant difference between faculty members' years of teaching experience and intentions to refer students with mental health concerns to mental health professionals.

H_{a6}. Faculty members' years of teaching experience will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o7}. There is no significant difference between faculty members' sources of mental health knowledge and intentions to refer students with mental health concerns to mental health professionals.

H_{a7}. Faculty members' sources of mental health knowledge will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o8}. There is no significant difference between faculty members' gender and intentions to refer students with mental health concerns to mental health professionals.

H_{a8}. Faculty members' gender will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o9}. There is no significant difference between faculty members' age and intentions to refer students with mental health concerns to mental health professionals.

H_{a9}. Faculty members' age will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o10}. There is no significant difference between faculty members' race and intentions to refer students with mental health concerns to mental health professionals.

H_{a10}. Faculty members' race will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

Definition of Terms

For the purposes of this study, the following terms were operationally or conceptually defined:

Mental Health-"A state of well-being in which every individual realizes his or her own potential, can cope with normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community" (World Health Organization, 2016, para. 1).

Mental Disorder-"A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning." (American Psychiatric Association, 2013, p. 20). Operationally, mental disorder is defined as a set of symptoms that meet the criteria of a diagnosable mental disorder according to the Diagnostic and Statistical Manual 5 (DSM-5) (American Psychiatric Association, 2013).

Mental Illness-Conceptually a term found in mental health literature and mainstream society that refers to diagnosable mental disorders.

Mental Health Problems-Refers to those with "less than optimal mental health" (MacKean, 2011, p. 12). Mental health problems do not meet the DSM-5 criteria for a diagnosis of a mental disorder; however, mental health problems put one at high risk for developing a mental disorder (Santor, Short, & Ferguson, 2009). For this study, the term mental health concerns was used also to refer to mental health problems.

Referral-Referral was the behavior being researched in the present study. According to Ajzen and Fishbein (1977) the behavior can be defined by "the *action*, the *target* at which the

action is directed, the *context* in which the action is performed, and the *time* at which it is performed" (p. 889). The *action* is the referral, the *target* is a student, the context is student's emotional state (mental health concerns), and the time (implicit) was what faculty committed to in their work as professors. Therefore, the definition of referral behavior for the study was referring or directing students with mental health concerns to a mental health professional.

Mental Health Professional-Mental health professional is seen as a broad term to identify professional counselors, therapists, psychologists, or clinical social workers (Servaty-Seib et al., 2013).

Intention-Ajzen (1991) defined intentions as "indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform a behavior" (p. 181).

Attitude-Azjen and Fishbein (1980) defined attitude as "a person's general feeling of favorableness or unfavorableness" towards a certain concept (p. 54). According to Ajzen (1991) attitude is explained by salient beliefs about the behavior in question.

Subjective Norm-Is a person's "perception that most people who are important to him [or her] think he [or she] should or should not perform the behavior in question" (Azjen & Fishbein, 1980, p. 57). Subjective norms also depend on one's motivation to comply with social pressures (Ajzen & Fishbein, 1980).

Perceived Behavioral Control-Is one's perception of his or her ability to perform a behavior and the ease or difficulty of the behavior in question (Azjen, 1991).

Summary

Higher education institutions are faced with increased numbers of students with mental illnesses (American College Health Association, 2014; Sieben, 2011; Gallagher, 2014). Research has shown college students with mental illness face many academic challenges and stressors (Salzer, 2012). University counseling centers are faced with increased pressures to meet student mental health needs, but remain underfunded and understaffed to meet the numerous needs of the campus community (LaFollette, 2009). In response to several tragic incidents on campuses and staggering research findings, higher education administrators have implemented campus-wide mental health promotion and suicide prevention strategies (Kraft, 2011).

One campus-wide strategy to promote students' mental health is to educate campus gatekeepers about recognizing signs of mental health concerns (Wallack et al., 2013). College faculty were more likely to hear from a student in distress than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, they are uniquely positioned to recognize and refer students to mental health professionals. Based on the theory of planned behavior, (Azjen, 1991) it can be seen likely that faculty members' intentions to refer students with mental health concerns to a mental health professional may be impacted by their attitudes, subjective norms, and perceived behavioral control. The theory of planned behavior was the conceptual framework for this study, which allowed me to explore the belief-based predictors of faculty intentions to refer students. Identifying these predictors will assist gatekeeper trainers to design curricula that will increase the likelihood of faculty referring students with concerns.

In this chapter I provided an introduction, statement of the problem, purpose and significance, and description and scope of the research. Additionally, I identified the research questions, hypotheses, and definition of terms. In chapter 2, I provide a literature review of the historical influences on college students' mental health, challenges for campuses and students with mental illness, gatekeeper training, and the role of faculty members and their interactions with students. Following, I provide a detailed description of the theory of planned behavior (Ajzen, 1991) as the theoretical framework for the study. In chapter 3 I present a description of the methodology, including the research design, sampling, instrumentation, procedures, and data analysis for the study.

Chapter II: Literature Review

In the review of the literature I first explore the historical influences on higher education institutions to understand how current mental health challenges on campuses are a result of the past. Second, I discuss challenges and stressors students with mental health concerns face. Third, I explore how campuses are striving to meet the needs of students and university communities through gatekeeper training and address the role of faculty and their interactions with students. Last, I present the theory of planned behavior (Ajzen, 1991) as a conceptual framework to understand faculty intentions to refer students.

Historical Influences on University Mental Health

Beginning of College Mental Health 1910 to 1960s

The origins of mental health services on college campuses are only a century old. In 1861, the first student health service was formed at Amherst College to address physical illnesses (Welch, 1982). It was not until 50 years later the first college mental health service was created at Princeton University in 1910 (Farnsworth, 1957). Psychiatry and college mental health were influenced greatly by the mental hygiene movement. In 1908, Beers published the book *A Mind That Found Itself* and stated the purpose of mental hygiene was to "imbed the psychiatric patient within a community-based support system that would become an unfailing source of information, advice, and comfort" (p. 296). In 1909 the mental hygiene movement began when the National Committee for Mental Hygiene was founded. This committee stated six main goals for the movement:

1. To work for the protection of the mental health of the public.
2. To help raise the standard of care for those threatened with nervous or mental disorder or actually ill.
3. To promote the study of mental disorders in all their forms and relations and to disseminate knowledge concerning their causes, treatment and prevention.
4. To obtain from every source, reliable data regarding conditions and methods of dealing with mental disorders.
5. To enlist the aid of the federal government as far as may seem desirable.
6. To coordinate the work of existing agencies and to help organize in each state in the Union an allied but independent Society for Mental Hygiene. (Beers, 1908, p. 320)

Beers (1908) described the importance of psychosocial treatments, research-informed practice, public education, assessing quality of care, and expanding treatment to all individuals with psychosocial difficulties. These goals laid the foundation for the professions of psychiatry, psychology, and social work (Kraft, 2011).

In 1910, Dr. Paton a psychiatrist and professor at Princeton University created the first mental health clinic on campus. Dr. Paton noticed that many students were dropping out of school because of emotional and personality problems (Farnsworth, 1957). Soon after the formation of the Princeton University mental hygiene clinic, a few universities began to follow by addressing mental hygiene in their student health clinics. Psychiatrists staffed most of these campus clinics because it was many years before psychologists and social workers were readily available to practice mental health care. Most colleges and universities were unable to create mental hygiene clinics because of lack of funding and trained professionals (Farnsworth, 1957).

The mental hygiene movement gave a few colleges a basis to address students' emotional and personality issues (Barreira & Snider, 2010).

In 1920, at the initial meeting of the American Student Health Association, now the American College Heath Association members discussed the need to address mental hygiene. Dr. Frankwood Williams (Farnsworth, 1957) stated four reasons for establishing campus mental health clinics:

> 1. The conservation of the student body, so that intellectually capable students may not be forced to unnecessarily to withdraw, but may be retained.
> 2. The forestalling of failure to form of nervous and mental diseases, immediate or remote.
> 3. The minimizing of partial failure in later mediocrity, inadequacy, inefficiency, and unhappiness.
> 4. The making possible of a large individual usefulness by giving to each a fuller use of the intellectual capacity he possesses, through widening the sphere of conscious control and thereby widening the sphere of social control. (Farnsworth, 1957, p. 11)

Over the next 20 years, many members of the American College Health Association supported these positions and national conferences took place to encourage universities to establish mental hygiene clinics (Kraft, 2009).

In the 1920s and 1930s, many institutions hired the first student personnel called "deans of men" to monitor and support students (Long, 2012). In 1937, the American Council of Education issued the *Student Personnel Point of View* (American College Personnel Association, 1937), which further specified the significance and need for supporting student learning. The

report stressed the importance of educating the entire student: mind, body, and spirit. Student personnel services became recognized as important because they addressed non-academic areas of students' lives (Thelin, 2004). A second report of the *Student Personnel Point of View* was published in 1949 (American College Personnel Association, 1949) that specified areas for student services to support each individual student. One of these specified areas was addressing student mental health: "Physical and mental health services whose orientation is not only the treatment of illness, but also, and even primarily, an educational program of preventive medicine and personal-hygiene counseling" (American College Personnel Association, 1949, p. 8). The emphasis on supporting students' learning gave colleges a foundation to coordinate student personnel services, including addressing students' mental health through counseling and prevention (American College Personnel Association, 1949).

Entry of Students with Mental Illness

In the 1940s after World War II, the G. I. Bill funded educational costs for many veterans to return to higher education. The G. I. Bill led to a dramatic increase in enrollment at colleges and universities around the nation; "In 1949, there were only 1,851 degree granting institutions; by 1969 the number had grown to 2,525 institutions (a 36% increase) and by 1989 there were 3,565 institutions (an additional 41% increase)" (Kraft, 2009, p. 269). Returning veterans, who had never had mental health concerns, showed symptoms of emotional problems that were seen as the result of war. Many had adjustment, social, and relationship challenges after returning home (Barreira & Snider, 2010). The influx of veteran students with mental health issues caused many universities to hire counseling professionals (Kraft, 2011), which led to a nationwide

expansion of campus mental health services. University administrators began to recognize every student, not only veterans and their families benefited from personal counseling (Kraft, 2011).

In 1950, Farnsworth a psychiatrist from Harvard University and American College Health Association member proposed that universities hire a variety of mental health professionals to manage the large influx of students. Farnsworth (1957) suggested that psychiatrists be utilized for complex cases and other qualified professionals could counsel less difficult cases. There were very few psychiatrists, but a larger number of clinical psychologists and social workers available (Kraft, 2011). Dr. Farnsworth also pointed out that the "mental health professional has a responsibility to the institution to make it a healthier place for all students, not only to the student patients who ask for help" (Farnsworth, 1957, p. 20). These recommendations were implemented in most university mental health clinics, as they became the first multidisciplinary clinics on campuses (Kraft, 2011).

Growth of the Mental Health Profession 1960s to 1980s

As colleges and universities had tremendous growth, psychology and counseling fields were growing as well. The development of research-based testing instruments brought these fields even more into higher education (Hodges, 2001). As the Cold War was beginning, the National Defense Education Act (NDEA) of 1958 focused on identifying and educating gifted individuals for careers that might be crucial in the space race (Sweeney, 2001). The NDEA provided funds for universities to offer educational and psychological testing services, funding that came at a vital time during the civil rights and women's movements. These historical events expanded the diversity of the student body, which increased the need for colleges to address students with mental health concerns (LaFollette, 2009).

The 1970s brought an increased in political opposition to the Vietnam War, increase drug and alcohol abuse, and distrust of traditional healthcare professionals (Kraft, 2011). As a result of these trends, colleges and universities began to see peer counseling services and drug drop-in centers (Kraft, 2009). The National Institute on Alcohol Abuse and Alcoholism began to sponsor campus-wide prevention programs to manage drug and alcohol abuse by students. Many conferences and publications during the early 1980s focused on developing more effective prevention, assessment, and treatment interventions for substance abuse. The result was that college professionals also began focusing on mental health prevention roles, through education and outreach efforts on campuses (Kraft, 2009).

As universities became more diverse and increased mental health promotion, more professionals were needed to provide services (Kraft, 2011). In the beginning, funding came from general university budgets. But, as state and general funding became less available, many universities began charging student fees for health services, which included mental health services. The prepaid health fee allowed colleges to shift the cost to students (Kraft, 2009). Universities also began to combine counseling services, which were initially created for guidance and vocational counseling and mental health clinics. Joining these two services created the university counseling center that remains the norm today (Kraft, 2011).

Current Trends 1990s to 2016

The 1990s brought increased focus on mental health awareness and education. University counseling centers also began to offer consultation to college staff and faculty who needed support addressing students with mental health concerns. The trend in providing campus-wide mental health education and consultation boosted the collaboration and increased

the dissemination of mental health support efforts for the entire campus community. Mental health promotion no longer became the sole responsibility of the university counseling center, but the whole college community (Kraft, 2009).

Publications about college students' psychological health are no longer limited to scholarly journal articles (Bishop, 2006). Mental health concerns within education have become a crucial issue in recent years after violent incidents on college campuses (Kraft, 2011). The popular press and media have over-represented college student violent crimes, highly publicized suicides, and alcohol overdose incidents. It is not surprising then that the general public has now taken an interest in the health and safety of college students (Bishop, 2006).

Additionally, *The Chronicle of Higher Education* published several recent articles regarding student mental health on college campuses. Stoltzfus (2015) provided an overview of survey results from the Jed Foundation's assessment of emotional readiness of college students. The survey found "students who feel less emotionally prepared for college than their peers tend to have lower grades and other negative experiences on campus" (para. 1). The more students are prepared to cope and manage the emotional and anxiety challenges in college, the better experience they will have and the more successful they will be. Wilson (2015) provided a synopsis of the increased demand and severity counseling centers across the nation are experiencing. She also offers insight into the challenges institutions face in deciding how to respond and manage students with mental illness. Lastly, Howard (2015) expressed the importance of training faculty and staff to respond to troubled students.

Students in the grip of mental distress often show signs of it in their academic work and classroom behavior. Faculty members, especially those who interact frequently with

> them, are well placed to pick up on warning signs. But professors often need help figuring out how to respond. (para. 2)

Kingkade (2016) reported that campus mental health services are busier now than even five years ago, "at a rate outpacing the growth in enrollment by five-fold" (para. 1). Hoffman (2015) explained mental health needs have grown tremendously at colleges, writing that the numbers of students with anxiety and depression are increasing putting an enormous strain on college mental health centers. Wallace (2015) provided an overview of the increase in mental illness and numbers of college students who seriously have considered suicide. In addition, the article discusses what universities are doing to train the campus community in suicide prevention and mental heath awareness through gatekeeper training programs. As can be seen in these press articles, higher education institutions are faced with many issues and challenges that have become growing trends in college students' mental health.

Watkins, Hunt, and Eisenberg (2011) found four themes emerge in their study of college counseling administrators views of current challenges: increased severity and demand for services, increased diversity of student population, changing roles of counseling centers, and institutional funding cuts. Every one of these challenges that emerged is consistent with the literature on current mental health trends at colleges. These current issues and challenges that university campuses face are a result of historical events and perspectives. The mental hygiene movement, World War II, Cold War, Vietnam War, Civil Rights movement, women's movement, psychiatric medication and psychotherapy advances, and focus on mental health education have all influenced colleges. Higher education institutions have changed in response to all these external forces in order to best serve their students (Hodges, 2001).

Students with Mental Health Concerns

Several scholars report the number of college students suffering from depression and suicidal thoughts is increasing (American College Health Association, 2014; Hunt & Eisenberg, 2010). Most chronic and lifelong mental illnesses have an onset between the ages of 18 to 24, the conventional college age (American Psychiatric Association, 2013; Kessler et al., 2005).

Mental Health and Mental Illness

The American Psychiatric Association (2013) defines *mental disorders* as:

> A syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder. Socially deviant behavior (e.g., political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, as described above. (p. 20)

Operationally defined, a mental disorder is a set of symptoms that meet the criteria of a diagnosable mental disorder according to the *Diagnostic and Statistical Manual 5* (DSM-5) (American Psychiatric Association, 2013). The *DSM-5* categorizes mental illnesses and defines the number of symptoms required to meet the criteria to be diagnosed. On the other hand, *mental health problems or concerns* refer to individuals with "less than optimal mental health" (MacKean, 2011, p. 12). The World Health Organization (2016) defines *mental health* as, "A

state of well-being in which every individual realizes his or her own potential, can cope with normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community" (para. 1). Mental health problems do not meet the DSM-5 criteria for a diagnosis of a mental disorder; however, mental health problems put one at high risk for developing a mental disorder (Santor et al., 2009). *Mental illness* is a term found in mental health literature and mainstream society that refers to diagnosable mental disorders.

Signs of Mental Health Concerns

The American Psychiatric Association (2015) states several early warning signs of mental illness include:

- Withdrawal—Recent social withdrawal and loss of interest in others
- Drop in functioning—An unusual drop in functioning, at school, work or social activities, such as quitting sports, failing in school, or difficulty performing familiar tasks
- Problems thinking—Problems with concentration, memory, or logical thought and speech that are hard to explain
- Increased sensitivity—Heightened sensitivity to sights, sounds, smells, or touch; avoidance of over-stimulating situations
- Apathy—Loss of initiative or desire to participate in any activity
- Feeling disconnected—A vague feeling of being disconnected from oneself or one's surroundings; a sense of unreality
- Illogical thinking—Unusual or exaggerated beliefs about personal powers to understand meanings or influence events; illogical or magical thinking typical of childhood in an adult

- Nervousness—Fear or suspiciousness of others or a strong nervous feeling
- Unusual behavior—Odd, uncharacteristic, peculiar behavior
- Sleep or appetite changes—Dramatic sleep and appetite changes or decline in personal care
- Mood changes—Rapid or dramatic shifts in feelings. (Signs and symptoms, para. 1)

> One or two of these symptoms alone can not predict a mental illness. But if a person is experiencing several at one time and the symptoms are causing serious problems in the ability to study, work, or relate to others, he/she should be seen by a mental health professional. People with suicidal thoughts or intent, or thoughts of harming others, need immediate attention. (Signs and symptoms, para. 2)

Indicators of Students' Mental Health Concerns

The University of California at Berkeley developed a guide to help faculty and staff identify students with mental health concerns (Cockrell, 2013). The guide has been replicated by other higher education institutions and has become a well-utilized resource to identify, approach, and refer concerning students. The University of California at Berkeley's University Health Services (2016) website provides the resource guide, which includes a list of student indicators of distress for faculty and staff. These indicators are possible signs students with mental health concerns exhibit that faculty may observe.

> *Academic Indicators*: Sudden decline in quality of work and grades; repeated absences; disorganized performance; multiple requests for extensions; overly demanding of faculty and staff time and attention; bizarre content in writings or presentations; faculty doing more personal rather than academic counseling during office hours

> *Physical Indicators*: Marked changes in physical appearance including deterioration in grooming, hygiene, or weight loss/gain; excessive fatigue/sleep disturbance; intoxication, hangovers, or smelling of alcohol; disoriented or "out of it"; garbled, tangential, disconnected, or slurred speech; behavior is out of context or bizarre; delusions and paranoia
>
> *Psychological Indicators*: Self-disclosure of personal distress such as family problems, financial difficulties, contemplating suicide, grief; unusual/disproportional emotional response to events; excessive tearfulness, panic reactions; irritability or unusual apathy; verbal abuse (e.g., taunting, badgering, intimidation); expressions of concern about the student by his/her peers
>
> *Safety Risk Indicators*: Unprovoked anger or hostility; physical violence (shoving, grabbing, assault, use of weapon); implying or making a direct threat to harm self or others; academic assignments dominated by themes of extreme hopelessness, rage, worthlessness, isolation, despair, acting out, suicidal ideations/violent behaviors—a "cry for help"; stalking or harassing; communicating threats via email, correspondence, texting, or phone calls. (Indicators of distress: What to look for, para. 1)

Prevalence

The college years are a time of significant transitions and stressors for students (Iarovici, 2014; Reynolds, MacPherson, Tull, Baruch, & Lejuez, 2011). The Suicide Prevention Resource Center (2004) stated:

> Major life transitions, such as leaving home and going to college, may exacerbate existing psychological difficulties or trigger new ones. Moreover, leaving family and

> peer supports to enter an unfamiliar environment with higher academic standards can deepen depression or heighten anxiety. (p. 8)

Non-traditional students and graduate students also experience significant transitions and stressors (Suicide Prevention Resource Center, 2004). Transitions and stress can become overwhelming if they exceed students' coping abilities (Freeburn & Sinclair, 2009; Kucirka, 2013), which can cause negative coping mechanisms and trigger mental health problems (Cook, 2007; Reynolds et al., 2011).

The National College Health Assessment conducted by the American College Health Association found that one in twelve college students reported having seriously considered suicide in the previous 12 months (American College Health Association, 2014). Findings also revealed 86% of college students felt overwhelmed and 33% of students felt so depressed it was difficult to function. Additionally, 14% of students reported being diagnosed with anxiety, 12% diagnosed with depression, 2% diagnosed with bipolar disorder, 2% diagnosed with eating disorders, 2% diagnosed with obsessive compulsive disorder, and 1% diagnosed with a substance use disorder (American College Health Association, 2014).

The expansion of psychotropic medications has been a major development in assisting individuals with mental illness. Research has shown psychiatric medication to be effective and safe, which has resulted in a large increase in usage since the 1990s (Kraft, 2009). According to the National Survey of Counseling Center Directors (Gallagher, 2014), 87% of directors from 293 institutions stated they observed an increase in the number of students coming to campus already taking psychiatric medications. In 2012, 24% of students utilizing the counseling center were already taking medication, which is up dramatically from 9% of students in 1994.

Students who have major depression, anxiety, attention-deficit/hyperactivity disorder, schizophrenia, and bipolar disorder benefit greatly from psychotropic medications. The use of these medications has

> allowed many students to remain in or return to school to complete their education. In earlier times, many such students would have dropped out of school and never returned. The change for some of these students can be dramatic and life affirming. (Kraft, 2009, p. 273)

Other students with mild depression, adjustment disorders, or generalized anxiety do well without medications or best with a combination of mild medications and psychotherapy (Kraft, 2009). Higher education institutions today offer multidisciplinary mental health services so that students receive many treatment options, including psychiatry for medication management and/or psychotherapy from a psychologist, social worker, or counselor (Kraft, 2009).

Current research not only suggests an increase in psychiatric medication usage, but also an increase in the number of students seeking mental health services and an increase in the severity of mental health problems (Gallagher, 2014; Kraft, 2009). The National Survey of Counseling Center Directors (Gallagher, 2014) reported 88% of directors have seen a significant increase in severe psychological disorders among their students. In addition, 92% of directors reported the number of students seeking help at their centers has been rapidly increasing in recent years. Eighty-eight percent of directors state the increased demand for counseling and more serious psychological problems have created staffing problems for their centers (Gallagher, 2014). This evidence shows that mental health problems are increasingly prevalent on today's college campuses.

Retention and Academic Performance

Researchers have shown college students with mental illness face many academic challenges and stressors (Salzer, 2012). One study found 86% of college students with mental illness withdraw from college, compared to 45% for students without mental illness (Collins & Mowbray, 2005). In another study by the National Alliance on Mental Illness (2012) findings revealed 64% of students with mental health problems end up withdrawing from school. In addition, results showed the number one reason students with mental illness do not seek help is because of stigma. Students with mental illness have lower grade point averages, face social isolation, and experience discrimination more often than students without a mental illness (Blacklock et al., 2003; Eisenberg et al., 2009). Many of these students reported they lost financial aid and scholarships because of their low-grade point averages or part-time status (National Alliance on Mental Illness, 2012).

The level of engagement students have with their college environments has been found to predict academic attainment and retention (Tinto, 1993). Pascarella and Terenzini (2005) showed that student engagement in academic, interpersonal, and extracurricular activities on campus are vital predictors of academic success. Salzer (2012) found students with mental illnesses are less engaged on campus and have poorer relationships, both of which were related to lower graduation rates. Salzer (2012) reported symptoms of mental illness, fear of stigma, and discrimination as the major reasons students were less integrated and had poorer relationships.

Researchers have also shown a positive relationship between college students' participation in mental health services and their academic success (Kognito Interactive, 2009). Turner and Berry (2000) found an average of 70% of counseled students said personal problems

were affecting their academic success, with nearly 50% saying they considered withdrawing from school. Wilson, Mason, and Ewing (1997) looked at retention rates of students who used counseling. They found students who received counseling had a 14% higher retention rate than students who did not follow through with counseling after a referral. Similarly, Turner and Berry (2000) found students in counseling had an 11.4% higher retention rate each year than all other students who were not in counseling. After receiving counseling, 61% said counseling services were helpful in stabilizing or improving their academic progress, and 44% said they decided to remain in school because of the counseling (Turner & Berry, 2000). Mental health concerns create academic and engagement challenges for many students who suffer from mental health concerns. Counseling can significantly improve retention rates and academic success for students with mental health problems.

Help-seeking Behaviors

Scholars have shown people at highest risk for mental health concerns do not seek professional help (Isaac et al., 2009). Between 30% to 60% of college students are unaware or uncertain about mental health services on campuses (Benedict, Aspler, & Morrison, 1977; Gelso, Karl, & O'Connell, 1972). On average, 10.4% of students utilize services at college counseling centers (Gallagher, 2014). Less than 20% of the college students who completed suicide received counseling (Gallagher, 2014). Thirty-six percent of college students who had diagnosable depression had not received medication or therapy in the past 12 months (Eisenberg, Gollust, Golberstein, & Hefner, 2007). Cranford, Eisenberg, and Serras (2009) found 67% college students diagnosed with mental illness and substance abuse stated desired mental health services,

but only 38% actually received professional counseling. Such data shows students who could benefit from mental health services may not seek out professional help.

Eisenberg, Hunt, and Speer (2013) found 78% of college students with mental health concerns received support from a nonprofessional, 67% from a peer, and 52% from family. Drum, Brownson, Burton Denmark, and Smith (2009) studied college students who had a history of suicidal ideation. Of those surveyed, 46% of students did not share their suicidal intentions with anyone. Among students who did disclose, 70% shared with roommates, partners, and friends. Students are more likely to seek help for another student than for themselves (Curtis, 2010). Nevertheless, researchers have shown students who have disclosed and received support found it beneficial (Drum, Brownson, Burton Denmark, & Smith, 2009).

Several researchers have studied why college students with mental health concerns do not seek professional help. Eisenberg, Golberstein, and Gollust (2007) found college students with depression who did not seek help reported that stress is a normal component of school, therefore lacked a perceived need for help. Czyz, Horwitz, Eisenberg, Kramer, and King (2013) examined college students' self-reported barriers to professional help seeking for those at risk for suicide. The results showed the most common barriers were the perception of not needing treatment (66%), lack of time (26%), preferred to handle own problems (18%), and stigma (12%). In another study of students with mental health diagnoses, 55% of students did not seek treatment because they preferred to manage their challenges on their own (Eisenberg, Hunt, Speer, & Zivin, 2011). Similarly, several researchers found stigma to be the main deterrent for students to seek counseling (Eisenberg, Downs, Golberstein, & Zivin, 2009; Givens & Tjia, 2002; Vogel, Wade, & Hackler, 2007).

Stigma

Examining college students' help-seeking behavior shows the reluctance of students to seek support for their mental health concerns. Previous studies have shown negative stigma and fear of consequences of disclosing are major barriers for college students seeking help (Curtis, 2010; Drum et al., 2009; Quinn, Wilson, MacIntyre, & Tinklin, 2009). Stigma is so pervasive the Surgeon General of the United States and the President's New Freedom Commission on Mental Health both stated stigma is the major barrier to receiving treatment for mental illness (United States Department of Health and Human Services, 1999; 2003). Martin (2010) said, "stigma is a socially constructed mark of disapproval, shame or disgrace that causes significant disadvantage through the curtailment of opportunities" (p. 261). Reidpath, Chan, Gifford, and Allotey (2005) defined stigma as "a mark borne by a person judged as unfit for sharing of social resources, and stigmatization is a process for controlling community membership or ensuring active social exclusion" (p. 5). Link and Phelan (2001) described stigma as a process that develops from labeling, stereotyping, separation, status loss, and discrimination. The process is facilitated by the use of power and influenced by cultural, social, and environmental elements.

Many researchers have shown some of the general public, college students, and college faculty and staff hold negative attitudes and beliefs about people with mental illness (Bathje & Pryor, 2011; Becker et al., 2002; Chug, Chen, & Liu, 2001; Link, Phelan, Bresnahan, Stueve, & Pescosolido, 1999; Schwartz, 2010). Bathje and Pryor (2011) examined public stigma towards those with mental illness. They found that public stigma is harmful to the self-esteem of those living with mental illness and is a barrier to receiving professional counseling. Chug, Chen, and Liu, (2001) studied college students' attitudes towards those with recent inpatient hospital stays

for mental health problems. The results showed students wanted greater social distance if they had no previous experience with persons with mental illness. Those students who had previous experience were more willing to engage with persons with mental illness. Becker, Martin, Wajeeh, Ward, & Shern (2002) found although the majority of faculty have positive expectations for students with mental illnesses, some faculty are not knowledgeable and have negative expectations for students with mental illness. In this study, faculty who had the potential for stigmatizing discrimination or social distancing had greater discomfort, were fearful, and less likely to help students with mental illness.

Eisenberg, Downs, Golberstein, and Zivin (2009) studied perceptions of stigma among college students. They described two different types of stigma, perceived public stigma and personal self-stigma. Public stigma was defined as "negative stereotypes and prejudices about mental illness held collectively by people in a community" (p. 523). Personal stigma was defined as "an individual identifies himself with a stigmatized group and applies corresponding stereotypes and prejudices to the self" (p. 523). Results showed college students had higher levels of public stigma than personal self-stigma. Students recognize the public's negative beliefs about mental illness and internalize those attitudes as their own. Findings also showed students with higher levels of personal stigma were less likely to seek professional help.

Stigmatization has an impact on those suffering from mental health concerns and leads to inequalities and discrimination. Martin (2010) explored the experiences of college students with mental health difficulties. Students reported an awareness of stigma and a yearning to be treated as a whole person, not a person with mental health concerns. Students were concerned about sharing their mental health challenges due to fear of discrimination and concerns of being

judged. One student reported he did not disclose because he was "concerned he would be seen as telling lies or wanting privileges" (p. 265). Martin (2010) explained stigma leads to discrimination, which causes disadvantage and limits opportunities for students with mental illness.

It is important on college campuses to create an environment of inclusion for students with mental health concerns; otherwise, stigma and discrimination will persist. Fink (2014) examined factors that promoted positive student mental health on campuses. Results showed "supportive college environments, students' sense of belonging, professional confidence, and civic engagement" (p. 380) were predictors of positive students' mental health. Findings also indicated environments that were non-inclusive and discriminatory created barriers for students to disclose and seek necessary help. Quinn, Wilson, MacIntyre, and Tinklin (2009) found college students' with mental health who received help from university support services valued it and found it beneficial. Quinn et al. (2009) provided recommendations on ways higher education administrators could create a more inclusive and supportive environment for students with mental illness. Their suggestions included clearer policies, specific institutional procedures, gatekeeper training for staff/faculty/administrators, educating students, peer support system, anti-stigma initiatives, and linking mental and physical well-being. Creating inclusive campus environments would support students to attain their educational and individual goals. It would also reduce the harmful impact of stigma and discrimination that marginalizes students with mental health problems (Martin, 2010). Therefore, it is essential higher education administrators support campus professionals, including faculty members to identify students with mental health concerns and refer them to mental health professionals to create inclusive campus environments.

As the prevalence and severity of mental health problems increases, it puts higher education institutions under immense pressure (LaFollette, 2009). University administrators must manage crises, develop prevention programs, and offer consultation to college staff and faculty to support students with mental health concerns (Kraft, 2009). There is an increased need and focus on mental health services, awareness, and education at institutions (Kraft, 2011).

Gatekeeper Training

Examining the historical and current challenges facing college campuses shows future institutional responses will need to be ever changing and comprehensive to meet the needs of students with mental health concerns. Currently, one campus-wide strategy to promote student mental health is through gatekeeper training (Wallack et al., 2013). Gatekeepers are individuals who may come in contact with persons at-risk for mental health concerns and have the opportunity to identify troubling behaviors. On college campuses gatekeepers are those who regularly connect with students, including faculty, academic advisors, deans of students, student affairs staff, coaches, and residence hall staff (Servaty-Seib et al., 2013). Providing gatekeeper training to campus community members can help in identifying students with mental health concerns and assist them in receiving early mental health services (Yufit & Lestor, 2004).

Gatekeeper training is based on the knowledge that people at highest risk for mental health concerns do not seek professional help (Isaac et al., 2009). Drum et al. (2009) studied college students who had a history of suicidal ideation. Of those surveyed, 46% of students did not share their suicidal intentions with anyone. Among the students who did disclose, 70% shared with roommates, partners, and friends. These results suggest students with mental health concerns tend to seek out informal supports before professional assistance. College faculty, staff,

and peers interact with students on a daily basis and are more likely to hear from a student in distress than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, they are uniquely positioned to recognize and refer students to mental health professionals.

Definition of Gatekeepers

One popular training strategy is focused on educating gatekeepers in the campus community to recognize signs of distress in students (Yufit & Lester, 2004). Gatekeeper training is a prevention strategy to educate informal supports to identify and refer at-risk individuals to professional services (Joiner, 2010). Historically gatekeeper training began as a prevention strategy to identify suicidal ideation, but has evolved to assist in recognizing individuals at-risk for many mental health issues (Isaac et al., 2009). The United States of Health and Human Services (2012) define gatekeepers as:

> Individuals in a community who have face-to-face contact with large numbers of community members as part of their usual routine. They may be trained to identify persons at risk of suicide and refer them to treatment or supportive services as appropriate. The range of these gatekeepers is broad. Examples include clergy, first responders, pharmacists, caregivers, and those employed in institutional settings, such as schools, prisons, and the military. (p. 139)

Simply stated, "gatekeepers open the gate to help for people at risk of suicide" (Isaac et al., 2009, p. 261). On college campuses gatekeepers are those who regularly connect with students, including faculty, academic advisors, deans of students, student affairs staff, coaches, and residence hall staff (Servaty-Seib et al., 2013). As shown earlier in the literature, college faculty,

staff, and peers are more likely to hear from a student in distress than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, as gatekeepers they are uniquely positioned to refer students for help. Mitchell, Kader, Haggerty, Bakhai, and Warran (2013) encourage all members of the campus community to receive gatekeeper training to recognize signs of mental health concerns, become aware of campus and community resources, and learn the skills needed to help students find appropriate services.

Purpose of Gatekeeper Training

Gatekeeper training began as a prevention strategy to manage individuals at risk-for suicide in the late 1960s in Philadelphia (Isaac et al., 2009). The first published research article on gatekeeper training was by Snyder (1971) for the *Bulletin of Suicidology.* Since this time, gatekeeper training has become widely used nationally and internationally for suicide prevention and mental health promotion (Isaac et al., 2009). Gatekeeper training is the most common used strategy on college and university campuses to identify and intervene with at-risk students (Davidson & Locke, 2010).

Over the past forty years, the purpose and goals of gatekeeper training have remained the same. Gould, Greenberg, Velting, and Shaffer (2003) stated the purpose of gatekeeper training is "to develop the knowledge, attitudes, and skills to identify (those) at risk, determine levels of risk, and make referrals when necessary" (p. 15). Gatekeeper training has several goals: to reduce stigma, increase awareness and knowledge, enhance confidence and skills to intervene, and increase referrals to professional resources (Cross et al., 2011). Burnette, Ramchand, and Ayer (2015) found the goals of gatekeeper training programs focus on "education about suicide/mental health, knowledge of risk factors, risk assessment, communication skills,

information about resources, and referral process/skills" (p. 3). The foundation of university gatekeeper training is to train individuals to recognize warning signs, question students, and refer at-risk students to counseling (Tompkins, Witt, & Abraibesh, 2010).

Features of Gatekeeper Models

Although the underlying goals among gatekeeper training programs are similar, the programs differ in content, methodology, and targeted gatekeepers. The content of gatekeeper training programs differs with comprehensiveness. Isaac et al. (2009) found gatekeeper training programs emphasize different components of training, such as knowledge, identifying risk factors, intervention skills, attitudes, and referring to resources. The training programs fluctuate in length of time anywhere from a few hours to 5 days (Centers for Disease Control and Prevention, 1992). The average length of training is 2 days (Isaac et al., 2009). Trainings also vary in cost, from no cost to several thousand dollars. Gatekeeper trainers may be paid mental health professionals or unpaid volunteers (Cross et al., 2011; Isaac et al., 2009). Some trainings are offered online and others are offered face-to-face. Models also use a variety of methods to train: workbooks, manuals, DVDs, lectures, case studies, role-plays, and small group discussions (Beidas & Kendall, 2010). Gatekeeper programs also differ who in the campus community is trained as a gatekeeper. Programs may focus their training to faculty, administrators, staff, students, parents, and/or resident advisors (Becker & Alan, 2013).

There are a wide variety of differences among gatekeeper training programs, despite the same foundational goals. Mayer (2014) conducted a content analysis of 16 gatekeeper training models listed on the Suicide Prevention Resource Center best practices registry. Mayer found seven types of learning strategies and materials that were similar among gatekeeper training

programs. The seven learning strategies most often used in gatekeeper programs were: "action-oriented pedagogy, lecture, presentation materials, audio/visual, case studies, self-study, and websites/references for autonomous learning" (p. 114). Mayer (2014) also found a few gatekeeper programs had different unique components; three gatekeeper training programs used social media as training materials for trainers, gatekeepers, and participants. Also, two programs had no gatekeeper responsibility for follow-up after referrals were given. Given the diverse components of gatekeeper training programs, it is important for further researchers to examine the content of models to enhance their efficacy.

Effectiveness of Gatekeeper Training

Researchers have shown gatekeeper training is an effective mental health promotion and suicide prevention strategy (Cross, Matthieu, Cerel, & Knox, 2007; Isaac et al., 2009; Kalafat & Elias, 1994; Pasco et al., 2012; Tompkins & Witt, 2009). Isaac et al. (2009) completed a systematic review of gatekeeper programs and found training positively affected the skills, attitudes, and knowledge of attendees. They concluded gatekeeper training is an essential prevention strategy. Pasco, Wallack, Sartin, and Dayton's (2012) and Tompkins and Witt's (2009) results showed improvements in communication and relational skills for resident assistants that attended a gatekeeper training program. Findings from Kalafat and Elias (1994) revealed trainees increased in perceived knowledge, motivation to intervene, and referral intentions. Cross, Matthieu, Cerel, and Knox (2007) found training resulted in increased recognition of warning signs and knowledge to intervene. They also found training enhanced individuals perceived self-efficacy or belief one can effectively intervene with at-risk individuals.

Burnette et al. (2015) conducted a comprehensive literature review on the effectiveness of gatekeeper training for suicide prevention. They used the National Registry of Evidence-Based Programs and Practices (NREPP) to identify studies that verify the effectiveness of programs (Substance Abuse and Mental Health Services Administration, 2012). Also, they conducted a database search of empirical gatekeeper training studies. Burnette et al. (2015) identified 53 articles that met their criteria for being relevant literature and described key constructs of each study.

Burnette et al. (2015) also presented a theoretical model to describe how gatekeeper training may influence individual characteristics of participants. The model they developed shows four factors that can be affected by gatekeeper training, which may influence a person's decision to intervene with at-risk individuals: knowledge, beliefs, attitudes, reluctance to intervene, and self-efficacy. The researchers concluded gatekeeper training improves knowledge, beliefs/attitudes, self-efficacy, and reluctance to intervene. They found the individual factors of being female, prior mental health knowledge, and experience working with at-risk individuals is associated with increased likelihood of intervening after gatekeeper training. Burnette et al. (2015) encouraged further researchers to assess how knowledge, beliefs, self-efficacy, and reluctance are related to intervening.

Gatekeeper Training Programs in University Settings

Gatekeeper training is the most common used strategy on college and university campuses to identify and intervene with at-risk students (Davidson & Locke, 2010). The Suicide Prevention Resource Center maintains a best practices registry that "identifies, reviews, and disseminates information about the best practices" for suicide prevention (Suicide Prevention

Resource Center, 2013, p. 1). Programs listed in the registry have been examined for "accuracy, likelihood of meeting objectives, and adherence to program design standards" (Suicide Prevention Resource Center, 2013, p. 1). Several of the most implemented gatekeeper training programs on college and university campuses are listed in the Suicide Prevention Resource Center registry: (a) Campus Connect, (b) Question, Persuade, Refer (QPR), (c) At-Risk for University and College Faculty, and (d) Applied Suicide Intervention Skills Training (ASIST).

Campus Connect. One of the most replicated gatekeeper training programs is Syracuse University's Campus Connect. It is a "3-hour experientially-based crisis intervention and suicide prevention training program" (Davidson & Locke, 2010, p. 281). Campus Connect has been used to train college and university faculty, staff, and students. The training includes information on risk and protective factors, suicide warning signs, and referral sources. It also includes "…experiential exercises and role-play practice intended to increase trainees skill and self-efficacy" (Cimini, et al., 2014, p. 94). Research has shown Campus Connect participants have significant improvements in intervention skills, knowledge, and comfort levels (Syracuse University Counseling Center, 2013). Pasco et al. (2012) found participants in Campus Connect increased skills and self-efficacy. They found the experiential exercises resulted in more skill attainment than the didactic exercises alone.

QPR. Question, Persuade, Refer (QPR) is one of the most comprehensive campus gatekeeper programs because it includes increasing awareness, detection, referrals, and engagement with at-risk students (Becker & Alan, 2013). QPR is a 60-minute online training program for individuals who may identify, screen, and refer at-risk persons for further assessment and care. There is an additional 3-hour specialized course for those in the education

community who want face-to-face, audience-specific training (QPR Institute, 2015). A unique feature of the specialized training is it includes campus-specific data to provide context and campus protocols for responding (Becker & Alan, 2013). Research has shown QPR college student participants have significant increases in knowledge, assessing, responding, and comfort levels (Tompkins & Witt, 2009). Jacobson, Osteen, Sharpe, and Pastoor (2012) found social work students after QPR training experienced increases in knowledge of risk signs, intervention skills, comfort intervening, and feelings of preparedness of being a gatekeeper. Additionally, Tompkins, Witt, and Abraibesh (2010) found school personnel who received QPR training showed increases in knowledge and attitudes.

At-Risk for University and College Faculty and Staff. At-Risk for University and College Faculty and Staff is an online 45-minute training program that offers web-based simulation with virtual at-risk students. It is intended for college and university faculty and staff to practice engaging and referring students who show signs of psychological distress (Kognito Interactive, 2015). The program also provides information on symptoms of mental distress, such as depression, anxiety, and suicidal ideations. A unique feature of the program is it can include campus-specific resources and referral procedures (Suicide Prevention Resource Center, 2013). Albright, Goldman, and Shockley (2013) conducted a longitudinal study and found At-Risk for University and College Faculty and Staff increased participants' gatekeeper skills of "identifying, approaching, and referring students exhibiting signs of psychological distress" (p. 4). Findings also revealed the program increased participants' self-efficacy, approach and referral rates, and number of discussions participants had with others regarding concerning

students. The increase in gatekeeper skills and behavioral changes remained significant at follow-up for 3, 6, and 12 months after the training.

ASIST. Applied Suicide Intervention Skills Training (ASIST) is a two day in-person training workshop focused on learning to intervene and help prevent suicide. ASIST teaches participants to connect, understand, and assist persons who may be at risk for suicide (LivingWorks Education, 2015). The training includes information on societal attitudes, suicide warning signs, intervention skills, and referral sources. Training is offered through mini-lectures, workbooks, discussions, group simulations, and role plays (Suicide Prevention Resource Center, 2013). Gould, Cross, Pisani, Munfakh, and Kleinman (2013) found ASIST trainees increased confidence levels in helping at-risk individuals and knowledge of suicidal behaviors. Research has also shown ASIST participants have significant increases in knowledge, positive attitudes, intervention skills, and intervention behaviors that are maintained over time (Rodgers, 2010).

Implementation of Gatekeeper Training Programs

The Suicide Prevention Resource Center (2013) strongly encourages gatekeeper training to be implemented only after community needs assessments have been conducted and a decision is made that gatekeeper training is an effective strategy to meet the needs. Wallack, Servaty-Seib, and Taub (2013) conducted a review of essential factors to developing and implementing gatekeeper trainings on college and university campuses. Through their review they developed a five-step strategic planning model for higher education institutions. The strategic planning model addresses variables administrators should consider to increase the success of campus gatekeeper training programs. The five-step model includes: “assessing campus culture,

assessing campus resources, selecting a training program, preparing the campus, and establishing and evaluating programmatic goals" (p. 28). Below is a description of each of the five steps in the strategic planning model:

1. Assessing campus culture by measuring student body demographics, student behavioral and mental health, current help-seeking behaviors, and campus values and attitudes toward mental-health issues. Locating national data sources and conducting campus surveys or focus groups can measure these items.
2. Assessing campus resources available to support gatekeeper training. It is important to identify who will conduct the training and who will be the target population to train. Also, it is important to assess the amount of time targeted gatekeepers are willing to commit to the training. Lastly, it is essential to gauge the availability of mental health resources to receive referrals from gatekeepers.
3. Selecting a training program to employ is important after considering the available resources and campus culture. Campus administrators are encouraged to review the Suicide Prevention Resource Center's Comparison Table of Suicide Prevention Gatekeeper Training Programs (Suicide Prevention Resource Center, 2013) when selecting a program. The table summarizes programs requirements, costs, target audiences, program highlights, and objectives.
4. Preparing the campus for gatekeeper training is important for successful implementation. This step addresses institutional buy-in and ensuring appropriate policies and procedures are in place. It also discusses creating strategies for

informing the campus community of plans to implement a gatekeeper training to generate community awareness.

5. Establishing and evaluating programmatic goals is essential for the success and maintenance of gatekeeper training. Campus administrators need to establish objective, measurable goals that are consistent with available campus resources and culture (Wallack et al., 2013).

Wallack et al.'s (2013) five-step strategic planning model shows college and university administrators how to effectively implement a campus gatekeeper training program. It is crucial thoughtful planning be done prior to implementing a gatekeeper training program. Campus resources and culture need to be consistent with the gatekeeper program. Additionally, higher education administrators must encourage gatekeepers, such as faculty members to recognize signs of mental health concerns and offer referrals to counseling when needed. However, it is important to understand what underlying factors may play a role in faculty intentions to refer students to a mental health professional to maximize the potential effectiveness of gatekeeper training.

Faculty Role with Students with Mental Health Concerns

College faculty, staff, and peers interact with students on a daily basis and are more likely to hear from a student in distress than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, they are uniquely positioned to recognize and support students with mental health concerns. Providing gatekeeper training to faculty members can help in identifying at-risk students and assisting them in receiving early mental health treatment (Yufit & Lester, 2004). Becker et al. (2002) found however that faculty members'

attitudes, perceived abilities, role expectations, and experiences influenced their interactions with students and intentions to refer students with mental health concerns.

This following section will discuss the historical role of faculty in higher education institutions. It will then address research regarding faculty-student interactions and students with psychiatric disabilities. Following will be a discussion about faculty attitudes and beliefs towards students with mental illness. Lastly, the focus will be on faculty assisting students with mental health concerns, including faculty referral intentions.

Historical Role of Faculty

The beginning of American higher education started in the Colonial era. The colonial colleges were focused on educating clergymen, students for public service, and character-building; "The colleges…were charged with transforming little boys into little men" (Thelin, 2004, p. 25). The doctrine of *in loco parentis*, meaning in place of the parent, was applied to institutions to monitor its students. Oftentimes faculty and tutors during the colonial times lived with their students on campus and became persistent disciplinarians. They enforced the rules of the college and monitored students' behavior, setting high expectations (Thelin, 2004). By the mid-1800s faculty roles began to change because of the influence of German universities (Long, 2012). The main role of faculty in colleges in Europe was to educate and train the student on intellectual matters, not social or behavioral ones. Faculty in American institutions became less active in managing student behaviors and conduct and more focused on educating the student on specific subject matters (Long, 2012). Professors began to be viewed as professional experts in their fields, which is still the norm in higher education (Thelin, 2004).

As the role of faculty changed from disciplinarian to content experts, presidents of colleges and universities saw a need to have others enforce campus rules and supervise students. In the 1920s many institutions hired the first student personnel called "deans of men" to monitor student behavior (Long, 2012). In 1937 the American Council of Education issued the *Student Personnel Point of View*, which further specified the importance and need for the student affairs profession. The report stressed the importance of educating the entire student: mind, body, and spirit. A second report of the *Student Personnel Point of View* was published in 1949 that specified areas for student services to support each individual student. The student affairs profession became recognized as important, addressing non-academic areas of students' lives and in charge of "enforcement of regulations" (Thelin, 2004, p. 221). Faculty, therefore, continued to distance themselves from the responsibility of addressing student behavior and imposing campus rules.

Another change in faculty roles occurred after World War I and II when the U.S. government began to work with higher education institutions on federal research grants (Boyer, 1990). American universities began to emphasize service and research above teaching, as federal research grants brought money into the institution. Since this time, faculty are expected to engage in teaching, research, and service; however, depending on institutional type some faculty roles are emphasized more than others (Rice, 1996). O'Meara and Braskamp (2005) examined faculty employment expectations and found faculty spent more time in research and writing than in teaching or service. Boyer (1990) found institutional reward systems for tenure and promotion prioritized research over teaching and service. This causes faculty to emphasize

time spent on research rather than teaching and service, which further separates faculty from direct contact with students (O'Meara & Braskamp, 2005).

A final development that has impacted faculty roles is the increase in non-tenure track and part-time faculty since the 1970s (Rosenblum & Rosenblum, 1990). Non-tenure track faculty, including part-time and full-time, now comprise the majority of the academic labor force in the United States (Kezar & Sam, 2010). Higher education institutions have relied on part-time and non-tenured track positions to keep salaries and benefits lower during difficult fiscal times (Zhang & Liu, 2010). Schuster and Finkelstein (2007) called this trend the academic contingent work force. Full-time tenured track faculty mainly conduct research, which leaves teaching to non-tenured track and part-time faculty (Schuster and Finkelstein, 2007). This change caused more tenured, full-time faculty to interact less with students (O'Meara & Braskamp, 2005). In addition, researchers have shown part-time and non-tenured track faculty are less involved in campus governance and administration (O'Meara & Braskamp, 2005; Schuster & Finkelstein, 2007). These trends in changing faculty roles have influenced faculty priorities regarding their academic responsibilities, which distances faculty from interacting with students.

Faculty Interactions with Students

Although the roles of faculty have changed overtime, scholars continue to show meaningful interactions between students and faculty promotes students' "persistence, educational aspirations, and degree completion" (Pascarella & Terenzini, 2005, p. 417). Student and faculty interactions also positively affect students' intellectual development, personal growth, and learning outcomes (Astin, 1993; Kuh & Hu, 2001; Tinto, 1993). Despite the

benefits of student interactions, faculty often report not having time, institutional support, and/or rewards to connect with students outside the classroom (Einarson & Clarkberg, 2004).

Wilson, Woods, and Gaff (1974) examined the effects faculty have on college students. The purpose of their quantitative study was to find "characteristics of faculty themselves which seem to facilitate or impede interaction with students beyond the classroom" (Wilson, Woods, & Gaff, 1974, p. 75). Faculty from six different types of institutions provided information on the types and numbers of out-of-classroom discussions of 10 minutes or more with students during the past two weeks. Findings from the study indicated outside of classroom interactions between faculty and students were infrequent. Additionally, results showed faculty who communicated to students their accessibility and held regular office hours had more out-of-classroom interactions with students. Faculty who valued "relating to students on a personal, one-on-one basis" also reported increased interactions with students (Wilson et al., 1974, p. 82). Other scholars have also found faculty who are student-centered and prioritize their teaching roles report higher levels of interaction outside the classroom with students (Cotten & Wilson, 2006; Golde & Pribbenow, 2000).

Einarson and Clarkberg (2004) examined factors that increase or decrease the likelihood of faculty interacting with students in out-of-class discussions. In this quantitative study, faculty were asked to complete a survey regarding two different types of outside classroom interactions: research-based activities and less-academic focused out-of-class activities. Results showed "faculty members' personal values and beliefs were strongly associated with their extent of engagement in out-of-class interactions, particularly for research based interactions" (Einarson & Clarkber, 2004, p. 2). Secondly, findings reported faculty members "interpersonal knowledge

and abilities had the strongest association with engagement in out-of-class interactions" (Einarson & Clarkber, 2004, p. 2), particularly for less-academic focused interactions. Faculty who did not value interactions outside the classroom with students were less likely to feel comfortable talking to students about non-academic matters and also reported the fewer number of out-of-class discussions. Einarson and Clarkberg's (2004) study shows faculty attitudes, beliefs, knowledge, and skills impact potential interactions with students; therefore, these factors may be potentially related to faculty intentions to refer students to mental health professionals.

Faculty and Students with Disabilities

Students with disabilities are entitled to reasonable academic accommodations as provided by the American with Disabilities Act (ADA) of 1990 and 2008. The American with Disabilities Act of 1990 (ADA) defines disability as "a physical or mental impairment that substantially limits a major life activity such as communication and working as well as caring for oneself, performing manual tasks, seeing, hearing, eating, walking, standing, lifting, bending, speaking, and breathing" (Chapter 126, Sec. 12102, Americans with Disabilities Act, 1990). The ADA was amended in 2008 to include learning activities such as concentrating, reading, and thinking (Americans with Disabilities Amendments Act, 2008). A metal impairment can include emotional or mental illness if it diminishes one's ability to cope with major life activities (Belch, 2011). In higher education research, most scholars use the term psychiatric disability when referring to a mental impairment covered by the ADA (Brockelman, 2011; Collins & Mowbray, 2005; Eudaly, 2003). Examples of psychiatric disabilities covered by the ADA are depression, bipolar disorder, anxiety disorders (which include panic disorder, obsessive compulsive disorder,

and post-traumatic stress disorder), schizophrenia, and personality disorders (Equal Employment Opportunity Commission, 1997).

Over the past decade, statistics have shown an increase in the number of college students requesting academic accommodations for psychiatric disabilities (Collins & Mowbray, 2005; Kitzrow, 2003). The National Center for Education Statistics (U.S. Department of Education, 2015) reports 13% of college students have a disability, as compared to 8% of students in 1978. College students with emotional or psychiatric illnesses now are the largest group of students who have a disability, as they represent 24% of all students with disabilities (U.S. Department of Education, 2015). The most common psychiatric disabilities among college students are depression, bipolar disorder, psychotic disorders, and anxiety disorders (Collins & Mowbray, 2005).

For college students with disabilities faculty attitudes, knowledge, and institutional culture are significant obstacles to obtaining academic accommodations and degree completion (Dowrick, Anderson, Heyer, & Acosta, 2005; Wolanin & Steele, 2004). Wolanin and Steele (2004) stated

> Faculty attitudes and the academic culture are the major barriers to the successful implementation of accommodations for students with disabilities. Faculty are often ignorant about their responsibilities and about how to relate to students with disabilities. Faculty resent being told what to do by low-level administrators in the disability services offices and not being able to review or question the legitimacy of a student's disability or the accommodation that is prescribed. (p. ix)

Roa (2004) conducted a literature review of faculty attitudes towards students with disabilities. The literature review revealed most faculty have positive attitudes towards students with disabilities. Although, the review also showed faculty knowledge, awareness, attitudes, and willingness to provide accommodations impacted students' success in college (Roa, 2004). Faculty's attitudes towards students with disabilities, particularly psychiatric disabilities, may impact their intentions to refer students to a mental health professional.

Dowrick, Anderson, Heyer, and Acosta (2005) found faculty lack of awareness and negative attitudes were obstacles for students with disabilities. Results also showed students with invisible disabilities, such as psychiatric disabilities that are not visibly seen, face additional barriers and questions of legitimacy from faculty. Sniatecki, Perry, and Snell (2015) conducted a similar study examining faculty attitudes and knowledge about students with disabilities. Findings showed that although the majority of faculty have positive attitudes, "they are more likely to hold negative attitudes toward students with mental health disabilities and learning disabilities than toward students with physical disabilities" (Sniatecki et al., 2015, p. 259). Faculty reported the most negative attitudes towards students with psychiatric disabilities, followed by students with learning disabilities. Sniatecki et al. (2015) suggested students with mental health disabilities might face more attitudinal obstacles from faculty compared to students with other types of disabilities, which may influence faculty intentions to interact and refer students to mental health professionals.

Faculty Assisting Concerning Students

There have been a few researchers who have examined factors that play a role in faculty assisting students with mental health concerns. Backels and Wheeler (2001) studied faculty

perceptions of students with mental illness, the amount of flexibility provided, and intentions to refer students to counseling. Results showed most faculty believe mental health issues have a negative impact on academic functioning. In regards to flexibility, female faculty members were more willing to extend flexibility to students than male faculty members. The number of years a faculty member had been teaching did not appear to affect willingness to extend flexibility. As far as referring students to counseling, female faculty were more likely than male faculty to refer students to mental health services. Also, faculty with teaching experience over 15 years were more likely to refer students than faculty who taught less than 15 years.

King (2001) studied faculty demographics and willingness to accommodate students with mental health disabilities. Results showed no significant differences for faculty academic discipline, gender, age, knowledge of policies, previous experience with persons with mental illness, or knowledge of campus resources. Easton and Van Laar (1995) found similar results, assessing the frequency of faculty responses to distressed college students. Findings indicated no significant differences for gender, age, or years of teaching experience in regards to the frequency of responding to distressed students.

Becker et al. (2002) examined "faculty and student attitudes, beliefs, knowledge, and experiences with students identified as having a mental illness" (p. 359). They developed a survey to assess respondents' ability to identify mental illness symptoms, the likelihood of referring to counseling and make academic accommodations, familiarity with and fear of mental illnesses, attitudes and beliefs, and awareness of campus resources. The survey also obtained demographic information on gender, age, ethnic group, academic department affiliation, and years of teaching experience.

Becker et al.'s (2002) results revealed although the majority of faculty have positive expectations for students with mental illnesses, some faculty are not knowledgeable and have negative expectations for students with mental illness. Faculty who had the potential for stigmatizing discrimination or social distancing had greater discomfort, were fearful, and less likely to help students with mental illness. Additionally, faculty who were not familiar with campus mental health services were less likely to discuss concerns with a student, convince students to seek help, and refer to counseling. Becker et al. (2002) suggested educating faculty about mental illnesses and campus resources would increase the likelihood of referrals. The researchers did not discuss the possibility that not only lack of knowledge and negative attitudes, but also the lack of abilities or difficulty in referring (perceive behavioral control), or others perceptions of referring (subjective norms) may deter faculty from referring students.

Becker et al. (2002) found significant differences on several demographic characteristics: gender, age, academic department affiliation, and years of teaching experience. Results suggested female faculty members were more likely than male faculty to discuss concerns with students, convince students to seek help, consult with campus resources, and refer students to mental health services. Younger faculty members were also more likely to refer students to campus counseling. Additionally, "faculty in the health sciences have made significantly fewer referrals and accommodations than faculty in arts and sciences, education, and business, who did not differ from one another" (Becker et al., 2002, p. 366). The authors suggested faculty with social distancing, lack of knowledge, lack awareness of campus resources, or negative attitudes may influence faculty intentions to refer students to a mental health professional. Findings also

suggest gender, age, academic department affiliation, and years of teaching experience may impact faculty intentions.

Brockelman, Chadsey, and Loeb (2006) conducted a similar study utilizing an adapted version of Becker et al.'s (2002) questionnaire. Brockelman et al. (2006) assessed the relationship between personal experience and faculty perceptions of working with students with a psychiatric disability. They also examined faculty comfort and confidence in working with students who have psychiatric disabilities. Findings indicated faculty with self-experience themselves having a psychiatric disability was the strongest predictor of confidence, perceptions, and comfort levels working with students with psychiatric disabilities. Although not as strong of a predictor as self-experience, faculty who had friends or previous students with psychiatric disabilities also had greater confidence, perceptions, and comfort levels. Results also showed the majority of faculty felt they did not have sufficient knowledge of mental illnesses and desired more training and awareness of resources.

The literature has shown faculty and student interactions outside of the classroom can positively affect students' intellectual development, personal growth, learning outcomes, persistence, and degree completion (Astin, 1993; Kuh & Hu, 2001; Pascarella & Terenzini, 2005; Tinto, 1993). Despite the benefits of student interactions, some faculty have negative attitudes, lack knowledge, and have discomfort towards students with mental illnesses (Becker et al., 2002; Brockelman et al., 2006; Sniatecki et al., 2015). A few studies have found the majority of faculty have positive expectations for students with mental illnesses (Becker et al., 2002; Sniatecki et al., 2015); however, several studies have shown faculty experiences, perceptions, attitudes, and comfort levels may possibly be related to faculty intentions to refer students to

mental health professionals (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman et al., 2006). Based on these studies, I questioned if faculty intentions to refer students to counseling is influenced by their attitudes, perceived skills and abilities, the impact of other people, and/or demographic characteristics.

Theoretical Framework

The theory of planned behavior (TPB) developed by Ajzen (1991) provides the theoretical framework for this study. The theory of planned behavior (TPB) is a model designed to explain motivational influence on behavior (Ajzen, 1988). The TPB suggests "a person's intention to perform in a behavior is the proximal determination of performing the behavior" (Servaty-Seib et al., 2013, p. 51). According to this theory, an individual's intention to engage in a particular behavior is influenced by their (a) attitude toward the behavior, (b) subjective norm, and (c) perceived behavioral control (see Figure 1).

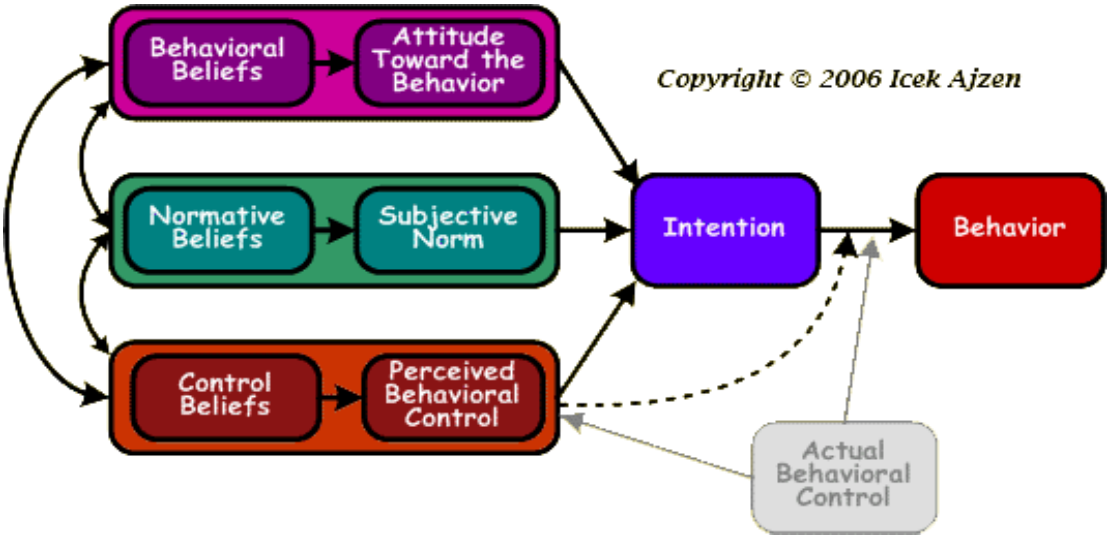

Figure 1. Ajzen's (1991) Theory of Planned Behavior. From "TPB Diagram," by I. Ajzen. Retrieved on September 13, 2015, from http:// http://people.umass.edu/aizen/tpb.diag.html. Copyright 2006 by Icek Ajzen.

Azjen and Fishbein (1980) defined the first construct *attitude* as "a person's general feeling of favorableness or unfavorableness" towards a certain concept (p. 54). The second construct, *subjective norm* is a person's "perception that most people who are important to him [or her] think he [or she] should or should not perform the behavior in question" (Azjen & Fishbein, 1980, p. 57). The third construct, *perceived behavioral control* is one's perception of his or her ability to perform a behavior and the ease or difficulty of the behavior in question (Azjen, 1991). As stated by Ajzen (1991), "the more favorable the attitude and the subjective norm and the greater the perceived behavioral control, the stronger should be the individual's intention to perform the behavior under consideration" (p. 188). Providing information is not enough to change behaviors; interventions must be focused at the determinants on the behavior (attitudes, subjective norms, and perceived behavioral control) and at the salient beliefs (Ajzen & Fishbein, 2005). The TPB has been identified as one of the most used theories to explain individuals' social behaviors (Perkins et al., 2007).

Behavioral Intention

Ajzen (1991) described intentions as "indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform a behavior" (p. 181). Peterson and Bredow (2004) defined behavioral intention as "the person's motivation to engage in a specific behavior" (p. 128). The more effort expended willing to carry out the behavior in question, the more likely the actual behavior will be performed. An individual's intentions are believed to predict one's actual behavior since "baring unforeseen events, people are expected to act in accordance with their intentions" (Ajzen, 1985, p. 12). Previous researchers have shown a

positive correlation between intention to act and actual behaviors (Ajzen, 1991; Ajzen & Fishbein, 1980).

Attitude

Attitude is defined as an individual's favorableness or unfavorableness towards the action behavior (Ajzen, 1991). The theory of planned behavior addresses attitudes towards behaviors, not attitudes toward "objects, people, or institutions." (Ajzen, 1985, p. 12). According to Ajzen (1991) attitude is explained by salient beliefs about the behavior in question. If an individual thinks engaging in a behavior will lead to a positive outcome, then one's attitude towards the behavior will be favorable. On the other hand if engaging in a behavior leads to a negative outcome, one's attitude towards the behavior will be unfavorable. It has been shown there is a positive relationship between attitude and intentions to perform the behavior; therefore, a person with favorable attitudes toward a behavior has higher intentions to perform the behavior (Ajzen, 1985). Ajzen (1985) stated demographic characteristics and personality traits only impact attitudes if they also influence the underlying beliefs one has towards the behavior.

Subjective Norms

Subjective norms is an individuals' "perception of the social pressures put on him or her to perform or not perform the behavior" (Ajzen & Fishbein, 1980, p. 6). If important others in an individual's life think the behavior should be performed, the individual will feel social pressure to do the behavior. Furthermore, if important others in an individual's life think the behavior should not be performed, the individual will feel social pressure to not do the behavior (Ajzen & Fishbein, 1980). According to Ajzen (1985) subjective norms, similar to attitudes, is explained by salient beliefs about whether influential others agree or disagree with performing the

behavior. Subjective norms also depend on one's motivation to comply with social pressures (Ajzen & Fishbein, 1980).

Perceived Behavioral Control

Perceived behavioral control is one's perception of his or her ability to perform a behavior and the ease or difficulty of the behavior in question (Azjen, 1991). Perceived behavioral control consists of two elements: control belief and perceived power (Ajzen, 1985). Control belief is an individual's belief about the availability of opportunities and resources needed to perform the behavior. Opportunities and resources include factors such as time, money, skills, assistance of others, and accessibility. Perceived power is an individual's perception of the amount of control they have over accepting or refusing to perform a behavior (Ajzen, 1991). Having confidence in one's capabilities to perform the behavior will increase the intention to perform the behavior. Perceiving engaging in the behavior as easy rather than difficult will increase the possibility of performing the behavior (Ajzen, 2002).

TPB Empirical Support

A review of the literature indicates many studies have used the theory of planned behavior to predict and understand motivational influences on behaviors (Ajzen & Fishbein, 2005; Armitage & Conner, 2001). The TPB has been used as a framework to research alcohol consumption (Conner, Warren, & Close, 1999), smoking (Norman, Conner, & Bell, 1999), drug use (Peters, Kok, & Abraham, 2008), breastfeeding (Dick et al., 2002), sexual decision-making (Beadnell et al., 2007), food consumption (Gratton, Povey, & Clark-Carter, 2007), and suicidal intentions (O'Conner & Armitage, 2003). Several studies have supported the predictive validity, with the theory of planned behavior explaining up to 52% of the variance in intentions and 34%

of the variance in performed behavior (Armitage & Conner, 2001; Godin & Kok, 1996; McGilligan, McClenahan, & Adamson, 2009).

The theory of planned behavior has also been applied in research with students in higher education and K-12 education. It has been shown to successfully predict college students' intentions regarding alcohol use and binge drinking (Collins & Carey, 2007; Huchting, Lac, & LaBrie, 2008), safer sexual practices (Bryan, Fisher, & Fisher, 2002; Cha, Kim, & Patrick, 2008), exercise (Gao & Kosma, 2008), and weight loss (Schifter & Ajzen, 1985). The theory of planned behavior has also been used as a framework to predict college students help-seeking intentions (Halgin, Weaver, Edell, & Spencer, 1987) and career counseling intentions (Lepre, 2007). Hagenbuch (2006) found college students' attitudes and perceived behavioral control were significant predictors of students' intentions to refer peers to counseling. Carr (2011) examined middle school teachers' intentions to refer eating disorder students to counseling. Results showed subjective norms and perceived behavioral control were predictive of teachers' intent to refer students. Attitude was found not to be predictive of teachers' intent.

Lee (2014), Servaty-Seib et al. (2013), and Schwartz (2010) also found the theory of planned behavior to be a useful tool in assessing beliefs in relation to the intentions of referring students to mental health professionals. These three studies are most closely related to my research; therefore, they are described in detail in the following section.

K-12 teachers' intentions to refer. Lee (2014) studied U.S. and South Korean K-12 teachers' intentions to refer students with attention-deficit/hyperactivity disorder (ADHD) symptoms to a mental health professional. Using the theory of planned behavior as the theoretical framework (Ajzen, 1991), Lee (2014) developed a TPB questionnaire for the study.

The TPB questionnaire measured three independent variables (attitudes, subjective norms, and perceived behavioral control) and one dependent variable (intention to refer). Two other questionnaires were utilized as well, the ADHD Stigma Questionnaire (Kellison, Busing, Bell, & Garvan, 2010) and the Knowledge of Attention Deficit Disorders Scale (Sciutto, Terjesen, & Bender Frank, 2000). The U. S. sample size was 182 teachers and the South Korean sample consisted of 144 teachers.

Results indicated U.S. teachers' intentions to refer were influenced by their beliefs related to attitudes, subjective norms, and perceived control in making a referral. Stigma and knowledge of ADHD were not significant in the U.S. sample. In the South Korean sample findings showed South Korean teachers' intentions to refer were influenced by their beliefs related to perceived behavioral control and stigma in making a referral. Attitudes, subjective norms, and knowledge of ADHD were not significant in the South Korean sample. These findings suggest differences exist between U.S. and South Korean teachers' predictors of intentions to refer students with ADHD symptoms (Lee, 2014).

Lee's (2014) study is limited by the demographic differences between the samples, data collection procedures, and recruitment techniques. Data collection procedures had a few limitations because of the differences between collection in the U.S. and South Korea samples. An online survey was used in the U.S. and a paper survey was used in South Korea. Also, the different recruitment procedures in the U.S. and South Korea may account for differences between groups. The results are therefore not generalizable; however, the findings offer guidance for the development of gatekeeper trainings and the importance of considering cultural contexts. Future training programs need to not only focus on developing knowledge and skills,

but also subjective norms, attitudes, and the self-efficacy about referring. Based on Lee's (2014) findings the theory of planned behavior is a useful tool in assessing beliefs in relation to the intention of referring to mental health professionals.

Resident assistants' intentions to refer. Servaty-Seib et al. (2013) studied resident assistants' (RAs) intentions to refer students to counseling. Using the theory of planned behavior as the theoretical framework (Ajzen, 1991), Servaty-Seib et al. (2013) developed a TPB questionnaire for their study to measure three independent variables (attitudes, subjective norms, and perceived behavioral control) and one dependent variable (intention to refer). The sample of RAs consisted of 25 women and 33 men from a single university.

Results indicated RA's intentions to refer were influenced by their beliefs related to subjective norms and their self-efficacy in making a referral (Servaty-Seib et al., 2013). Significant differences were also found for race; non-White RAs reported more positive attitudes towards referring to mental health professionals than White RAs. Findings showed no differences for sex, year in the university, or length of time working as RAs. These findings suggest RAs who are confident, view the referral process as easy, and have important others approving of referring are more likely to refer to a mental health professional.

Sevarty-Seib et al.'s (2013) study is limited by the demographics of the sample and the data collection procedures because they were performed online. The results are therefore not generalizable to RAs from other universities; however, the findings offer guidance for increasing the effectiveness gatekeeper trainings. Future trainings need to not only focus on developing knowledge and skills, but also subjective norms and the self-efficacy about referring. Based on Sevarty-Seib et al.'s (2013) findings the theory of planned behavior is a useful tool in assessing

beliefs about intentions to refer to mental health professionals. This leads to additional questioning if the theory of planned behavior could be used to measure and guide the development of gatekeeper training for faculty members.

Faculty intentions to respond. In a study most closely related to my research, Schwartz (2010) conducted a qualitative study of faculty's intentions to respond to the acutely distressed college student. Schwartz (2010) used an interview protocol framed by the theory of planned behavior to explore faculty members' underlying beliefs about responding to distressed students. Twenty faculty members from a four-year private, research institution were interviewed.

Schwartz (2010) identified from the interviews six ways faculty respond to distressed students: referring to resources, discussing with students the issues, providing academic accommodations, consulting with colleagues, expressing sympathy, or avoiding the personal issue. Results showed beliefs that influenced faculty responses were, "role as faculty member, sense of moral or ethical obligation, desire to help, sense of boundaries, lack of trust that student distress was genuine, fear of individuals with mental illness and social distancing, and student interaction to faculty responding" (Schwartz, 2010, p 138). Based on these themes that emerged, Schwartz (2010) indicated faculty intentions were influenced by all three constructs of the TPB: attitudes, subjective norms, and perceived behavioral control. Additionally, findings showed faculty did not feel they had clear policies about how to respond to distressed students or adequate education about mental illnesses.

Schwartz's (2010) study was limited because the sample was from one institution and all 20 faculty members were full-time faculty. The results are therefore not generalizable; however, the findings showed the need for faculty education on mental illness, ways to respond and refer

distressed students, and clear institutional policies. Based on Schwartz's (2010) findings the theory of planned behavior is a useful tool in assessing beliefs about intentions to refer to mental health professionals. Schwartz (2010) suggested future research should use the findings to develop a quantitative instrument to test if underlying beliefs predict faculty intentions to refer students, which justifies the need for my study.

Summary

As can be seen from the literature, historical influences and external forces have impacted higher education institutions and they are now faced with increased numbers of students with mental illnesses (American College Health Association, 2014; Gallagher, 2014; Sieben, 2011). Researchers have shown college students with mental illness face many academic challenges and stressors (Salzer, 2012). Universities are faced with increased pressures to meet students' mental health needs, but remain underfunded and understaffed to meet the numerous needs of the campus community (LaFollette, 2009). In response to several tragic incidents on campuses and staggering research findings, higher education institutions have implemented campus-wide mental health promotion and are educating campus gatekeepers about recognizing signs of mental health concerns (Kraft, 2011; Wallack et al., 2013).

College faculty interact with students on a daily basis and are more likely to hear from a student in distress than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, they are uniquely positioned to recognize and refer students to mental health professionals. Based on the theory of planned behavior I hypothesized that faculty members' intentions to refer students with mental health concerns to a mental health professional may be impacted by their attitudes, subjective norms, and perceived behavioral control. Using

the TPB as the conceptual framework for this study allowed me to explore the belief-based predictors of faculty intentions to refer students. To my knowledge, only three studies have explored this using quantitative approaches (Carr, 2011; Lee, 2014; Servaty-Seib et al., 2013). These studies explored resident assistants' and K-12 teachers' referral intentions and it was my goal to identify predictors among faculty members to refer students to counseling. By detecting these predictors higher education administrators can better prepare faculty to identify and refer students to seek counseling. Also, educators who train gatekeepers can use this information to develop curricula that increase the likelihood faculty gatekeepers will identify and refer students. Lastly, identifying these predictors will eventually assist college students with mental health concerns in receiving needed mental health services, improving campus communities. It will also reduce barriers for college students suffering from mental illness and increase the likelihood of academic success.

Chapter III: Methodology

A review of the literature suggests faculty and student interactions outside of the classroom can positively affect students' intellectual development, personal growth, learning outcomes, persistence, and degree completion (Astin, 1993; Kuh & Hu, 2001; Pascarella & Terenzini, 2005; Tinto, 1993). Despite the benefits of student interactions, some faculty have negative attitudes, lack knowledge, and have discomfort towards students with mental illnesses (Becker et al., 2002; Brockelman et al., 2006; Sniatecki et al., 2015). A few studies have found the majority of faculty have positive expectations for students with mental illnesses (Becker et al., 2002; Sniatecki et al., 2015); however, several studies have shown faculty experiences, perceptions, attitudes, and comfort levels may possibly be related to faculty intentions to refer students to mental health professionals (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman et al., 2006). Based on these studies, I questioned if faculty intentions to refer students to mental health professionals is influenced by their attitudes, perceived skills and abilities, the impact of other people, and/or demographic characteristics.

The purpose of this study was to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. This section describes the methodology of this investigation, including research design, sampling, instrumentation, procedures, and data analysis.

Research Design

This study used non-experimental, quantitative design to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. I used quantitative methods to collect data, as the literature revealed only three

other studies have explored this using quantitative approaches (Carr, 2011; Lee, 2014; Servaty-Seib et al., 2013); however, these studies explored resident assistants' and K-12 teachers' referral intentions and it was my goal to identify predictors among faculty members.

Ajzen's (1991) theory of planned behavior (TPB) provides three constructs for belief-related predictors (attitudes, subjective norms, and perceived behavioral control), which allowed me to draw the variables. The three belief-related independent variables were attitudes, subjective norms, and perceived behavioral control. The dependent variable was the intention to refer a student to a mental health professional. For the purposes of my study, *intention to refer* was the behavior being researched. According to Ajzen and Fishbein (1977), the behavior can be defined by "the *action*, the *target* at which the action is directed, the *context* in which the action is performed, and the *time* at which it is performed" (p. 889). The *action* was the intention to refer, the *target* was a student, the context was a student's emotional state (mental health concerns) and the time (implicit) is what faculty commits in their work as professors. Therefore, the definition of *referral* behavior for this study is referring or directing students with mental health concerns to a mental health professional. *Mental health concerns* refer to those with "less than optimal mental health" (MacKean, 2011, p. 12). Mental health concerns do not meet the DSM-5 criteria for a diagnosis of a mental disorder; however, mental health problems put one at high risk for developing a mental disorder (Santor et al., 2009). *Mental health professional* was seen as a broad term to identify professional counselors, therapists, psychologists, or clinical social workers (Servaty-Seib et al., 2013).

Additional demographic independent variables that were examined in this study included faculty members' rank, academic discipline, years of teaching experience, sources of mental

health knowledge, gender, age, and race. Previous researchers' have found these characteristics as potentially influencing persons' intentions to refer students to mental health professionals (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman et al., 2006; Burnette, Ramchand, & Ayer, 2015; Chadsey & Loeb, 2006; Schwartz, 2010).

Using the theory of planned behavior (Ajzen, 1991) as the conceptual framework for this study allowed for exploration of the belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. The following research questions and hypotheses guided this study:

RQ1. What are the belief-related predictors (attitudes, subjective norms, and perceived behavioral control) of faculty members' intentions to refer students with mental health concerns to mental health professionals?

H_{o1}. There is no significant difference between faculty members' *attitudes* and intentions to refer students with mental health concerns to mental health professionals.

H_{a1}. Faculty members' *attitudes* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o2}. There is no significant difference between faculty members' *subjective norms* and intentions to refer students with mental health concerns to mental health professionals.

H_{a2}. Faculty members' *subjective norms* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o3}. There is no significant difference between faculty members' *perceived behavioral control* and intentions to refer students with mental health concerns to mental health professionals.

H_{a3}. Faculty members' *perceived behavioral control* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

RQ2. What differences exist in intentions to refer students with mental health concerns to mental health professionals based on faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race?

H_{o4}. There is no significant difference between faculty members' rank and intentions to refer students with mental health concerns to mental health professionals.

H_{a4}. Faculty members' rank will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o5}. There is no significant difference between faculty members' academic discipline and intentions to refer students with mental health concerns to mental health professionals.

H_{a5}. Faculty members' academic discipline will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o6}. There is no significant difference between faculty members' years of teaching experience and intentions to refer students with mental health concerns to mental health professionals.

H_{a6}. Faculty members' years of teaching experience will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o7}. There is no significant difference between faculty members' sources of mental health knowledge and intentions to refer students with mental health concerns to mental health professionals.

H_{a7}. Faculty members' sources of mental health knowledge will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o8}. There is no significant difference between faculty members' gender and intentions to refer students with mental health concerns to mental health professionals.

H_{a8}. Faculty members' gender will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o9}. There is no significant difference between faculty members' age and intentions to refer students with mental health concerns to mental health professionals.

H_{a9}. Faculty members' age will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o10}. There is no significant difference between faculty members' race and intentions to refer students with mental health concerns to mental health professionals.

H_{a10}. Faculty members' race will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

Population and Sampling

The participants were full-time or part-time faculty members at a single, Midwestern public four-year university with a Carnegie classification of Masters M. As of fall 2015 there were 8,753 students enrolled, 93% of which are undergraduate students. This institution was chosen because of the variety of students due to two unique campuses. It is a two-campus university with the main campus located 50 miles from the second campus. The main campus is a residential campus and serves traditional aged students, who are attending full-time daytime classes. The second campus is a commuter campus that serves non-traditional aged students who are attending part-time evening classes. Most of the students on this second campus have transferred into the four-year institution after obtaining their two-year degree at a community college (U.S. Department of Education, 2014).

The population included all full-time or part-time faculty members at the Midwestern public four-year university, of which there were 316 full-time and 187 part-time faculty members (U.S. Department of Education, 2014). In order to determine necessary sample size, I used G*Power 3 to calculate a priori power analysis (Faul, Erdfelder, Lang, & Buchner, 2007). Power analysis is used to determine the minimum sample size needed to potentially detect an effect. Scholars state acceptable parameters are a medium effect size r^2 of 0.15, alpha $\propto$ of 0.05, and observed power 1-β of 0.80 (Cohens, 1988; Field, 2013). I used three main predictor variables, therefore G*Power 3 calculated a minimum required sample size was 77 to complete a regression analyses using the recommended parameters (Faul et al., 2007).

The sample consisted of 149 faculty members, which was a 28.8% response rate. There were 101 females (67.8%) and 48 males (32.2%) in the sample, of which 88.6% were White (n =

132) and 11.4% were non-White (n = 17). The sample was not randomly selected; therefore, faculty characteristics of the population differed from the sample as shown in Table 1 (U.S. Department of Education, 2015).

Table 1

Comparison of Population and Sample Characteristics

Faculty Characteristic		% of Population (N=503)	% of Sample (N=149)
Gender			
	Male	38.7	32.2
	Female	61.3	67.8
Race			
	White	90.4	88.6
	Non-White	9.6	11.4
Faculty Rank			
	Full Professor	31.4	28.9
	Associate Professor	17.6	18.8
	Assistant Professor	24.4	28.9
	Instructor	10.1	10.7
	Adjunct	16.5	12.8
Academic Discipline			
	Social Sciences	18	22.1
	Natural Sciences	12.3	10.1
	Math and Computer	7.6	4.7
	Humanities	10	6.7
	Arts	8.5	4.7
	Education	14.8	22.1
	Business and Finance	11.4	4
	Engineering	1.4	0.7
	Health Sciences	16	24.8

To summarize, the sample of faculty was most similar to the population of faculty on gender, race, and faculty rank. The characteristic that differed the greatest was the academic discipline. The demographics of the sample are not representative of all faculty members; therefore, the generalizability of the findings must be viewed carefully.

Instrumentation

A modified version of the Theory of Planned Behavior (TPB) Questionnaire developed by Servaty-Seib, et al. (2013) was used in this study. The original TPB questionnaire focused on resident assistants' beliefs regarding the value and benefit of referring an emotionally overwhelmed student to speak with a mental health professional. The original TPB questionnaire consisted of 24 items measuring the TPB belief attitudes (9 items), subjective norms (6 items), and perceived behavioral control (5 items). In addition, there were four items assessing intentions to refer. The original questionnaire was developed based on a review of the literature. Additionally, Servaty-Seib, et al. (2013) conducted a brief, qualitative elicitation investigation in the development process of the instrument to further the validity. Servaty-Seib, et al. (2013) found cronbach's alpha coefficients measuring internal consistency for the following variables: attitudes toward referral (α = .86), subjective norms (α = .86), perceived behavioral control (α = .76), and intention to refer (α = .82). These values all are above the recommended alpha level of .70 for acceptable internal consistency, therefore showing the original TPB questionnaire being a reliable instrument.

Although the Theory of Planned Behavior (TPB) Questionnaire developed by Servaty-Seib, et al. (2013) was designed to assess resident assistants' intentions, I modified the survey to reflect faculty intentions using Francis et al.'s (2004) manual and guidelines for constructing a

TPB measure. The focus of this manual is "assisting researchers to construct a theory based research tool in a systematic and replicable manner" (Francis et al., 2004, p. 7). I obtained permission to use and modify the TPB questionnaire from Dr. Heather Servaty-Seib on February 1st, 2016 via email (Appendix A). Based on recommendations from Dr. Servaty-Seib and Francis et al. (2004), I conducted a brief qualitative elicitation investigation with 9 faculty members from a single, Midwestern public four-year university to further the validity. I asked faculty to respond to questions regarding the advantages and disadvantages of making referrals (attitudes), who important others would approve or disapprove of referring (subjective norms), and the perceived challenges or helpful factors for referring (perceived behavioral control). I also asked faculty to define mental health concerns to ensure their understanding was aligned with my understanding. The faculty responses helped me modify the TPB questionnaire to be relevant to higher education faculty.

The modified TPB questionnaire was pilot tested on a convenience sample of faculty (N = 18) to ensure instrument effectiveness. I asked faculty to complete the survey and answer additional questions to test for clarity and face validity. Faculty agreed the time estimate of about 5 to 10 minutes to complete the survey was accurate. After the pilot study, minor changes were made to the questionnaire to simplify and provide clarity.

The modified TPB questionnaire consisted of 25 items measuring the TPB belief attitudes (11 items), subjective norms (5 items), and perceived behavioral control (6 items). In addition, there were three items assessing intentions to refer. The questions were rated by participants on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree) (Appendix B). The mean scores of each of the four subscales were used for analyses as recommended by Francis et al. (2004).

The higher subscale scores represented more positive attitudes, more favorable subjective norms, the perception of more personal control, and higher intentions to refer students.

I used cronbach's alpha coefficients measuring internal consistency to assess the reliability of the modified TPB questionnaire subscales. Results showed the reliability of the four subscales to be very good. The reliability for the dependent variable intention to refer was excellent, $\alpha = .877$. Reliability for two independent variable subscales was also very good: attitudes toward referral $\alpha = .867$ and subjective norms $\alpha = .884$. The perceived behavioral control subscale initial reliability was $\alpha = .687$, which is below the acceptable value. I examined the item analysis and saw if question "Whether I refer a student with mental health concerns to a mental health professional is entirely up to me", was deleted internal consistency increased. Therefore, I deleted this question and the internal consistency of the remaining 5 items on the perceived behavioral control subscale was $\alpha = .824$. Cronbach's alpha coefficients were all above the traditionally acceptable value of .70; therefore all four subscales were retained in data analyses (Field, 2013). A description of each of the four subscales is following.

The items in the attitudes subscale comprised of bipolar adjectives that were evaluative. Francis et al. (2004) suggested using a good-bad scale to capture overall evaluation. The following 11 pairings of bipolar adjectives were used to measure attitudes: strength-weakness, valuable-worthless, pleasant-unpleasant, good-bad, beneficial-harmful, easy-difficult, brave-cowardly, comfortable-uncomfortable, responsible-irresponsible, simple-complex, and safe-unsafe. Cronbach's alpha measuring the internal consistency of the eleven items (with reverse scoring as appropriate) was .867. Possible scores ranged from 11 to 77 using the likert scale of 1 to 7. Higher scale scores indicated more positive attitudes toward referral.

The five subjective norms subscale items focused on faculty perceptions of how important other people (faculty, administrators, and staff) would view their referring a student to a mental health professional. An example of a question from this subscale is, "The individuals I work with (e.g., faculty, administrators, and staff) expect me to refer a student with mental health concerns to speak with a mental health professional." Another question was, "People in my life who are important to me would approve of my decision to refer a student with mental health concerns to a mental health professional." Possible scores ranged from 5 to 35 using the likert scale of 1 to 7. Higher scale scores indicated more supportive subjective norms, or perceived approval from important others, towards referral. The cronbach's alpha for the five subjective norms items was .884.

The six perceived behavioral control items measured faculty members' self-efficacy and beliefs about controllability regarding intentions to refer. The two questions that measured self-efficacy included, "I am *not* confident that I could refer a student with mental health concerns to speak to a mental health professional" and "For me to refer a student with mental health concerns to speak to a mental health professional is [easy to difficult]." One example of the four questions that measured controllability is "I have the knowledge necessary to recognize mental health concerns in students and make a referral to a mental health professional." Possible scores ranged from 6 to 42 using the likert scale of 1 to 7. The cronbach's alpha for all six items (two self-efficacy and four control) was .687 (with reverse scoring as appropriate). After deleting one question internal consistency increased to .824. High scores indicated higher self-efficacy and controllability towards referral behavior.

Faculty intentions to refer subscale consisted of three questions. One example of a question was, "I will try to refer a student with mental health concerns." Possible scores ranged from 3 to 21 using the likert scale of 1 to 7. Cronbach's alpha measuring the internal consistency of the three items was .877. Higher scale scores indicated greater intentions to refer students with mental health concerns.

Additional demographic independent variables that were examined in this study included faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race. Previous researchers' have found these characteristics potentially influencing persons' intentions to refer students to mental health professionals (Backels & Wheeler, 2001; Becker et al., 2002; Burnette et al., 2015; Chadsey & Loeb, 2006). I also collected additional data on survey responses from faculty that were of interest to the implications of my findings. I asked faculty who have referred a student in the past and who desired information about mental health concerns, including their preferred formats for the education. This data was collected through self-report demographic questions at the end of the survey.

Procedures

Approval for the study was requested and received from the Institutional Review Board's of St. Cloud State University and one other Midwestern public four-year university in April of 2016 (Appendix C & D). Using convenience sampling techniques, I received an email list of all faculty members provided by the university's communications department. The distribution list was the sampling frame for the study. Using the email list, the online survey was distributed over a three week period in April and May of 2016.

I generated a recruitment email describing the study and included a website link to Qualtrics online survey software (Appendix E). Qualtrics software only allowed one response from each internet address and did not collect identifying information. The Qualtrics link contained the consent letter, demographic items, and the modified Theory of Planned Behavior (TPB) quantitative questionnaire regarding referral-related beliefs and intentions. To ensure confidentiality, questionnaires did not ask identifying information and were identified using number codes. Informed consent was obtained by asking participants to agree to the consent letter prior to completing the online questionnaire. The consent stated participation was voluntary and respondents could withdraw at any time without penalty, identified the risks and benefits of participating, and provided contact information for the results or any questions (Appendix F). Participants were told by continuing to complete the survey they consented to participate in the study.

Dillman (2000) found in survey research that multiple follow-up emails improve response rates. Therefore, I sent a follow-up email two weeks after the initial recruitment email was sent (Appendix G). Additionally, to improve response rates I avoided sending the survey out at the beginning or end of the academic semester. These times during the semester are busier for faculty, which could lead to a lower response rate. After the follow-up email, the survey remained open for another week to increase responses.

Data Analysis

Data collected was analyzed using both descriptive and inferential statistics through SPSS statistical software. The survey data was downloaded from Qualtrics online software and imported into SPSS software for analysis. Before analysis began I examined the data for

completeness. If a participant failed to respond to less than 80% of the survey questions, the respondent was deleted from the study. Nonresponses were missing completely at random. Missing values were replaced with the median score for each subscale. Also, any participants who identified as non-teaching faculty were also removed. Therefore, 12 respondents were eliminated from the study and the final sample size was 149 faculty members.

Descriptive statistics was used to identify the means and standard deviations for scores on all four subscales and demographic variables. The subscale scores were computed in SPSS by combining items from the TPB questionnaire. As shown earlier, reliability testing was conducted with cronbach's alpha and all four subscales showed adequate internal consistency. Correlational analysis was used to examine the relationships between the variables. Before beginning hypothesis testing, I examined underlying assumptions of multiple linear regression to ensure the data were suitable. The results of checking linearity, homoscedasticity, normality of residuals, independent errors, presence of outliers, and collinearity ensured no assumptions were violated.

After testing assumptions, I used multiple linear regression to determine if the independent demographic variables contributed to the statistical prediction of the intention to refer students to mental health professionals. I also conducted a multiple linear regression to determine if attitudes, subjective norms, and perceived behavioral control contributed to the prediction of intention to refer. A p value of less than .05 was considered statistically significant. This allowed me to examine the two research questions and reject or accept the associated hypotheses.

Summary

This chapter described the research methodology used in the study. The purpose of this study was to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. The participants were faculty members at a single, Midwestern public four-year university. A modified version of the theory of planned behavior questionnaire was emailed to faculty members via Qualtrics software. Data regarding the theory of planned behavior belief-based predictors and demographic information were collected. Questionnaire results were imported into SPSS for analysis. Following, I conducted descriptive and inferential statistics to examine the two research questions and reject or accept the associated hypotheses.

Chapter IV: Results

As can be seen from chapter 2, universities are faced with increased numbers of students with mental illnesses (American College Health Association, 2014; Sieben, 2011; Gallagher, 2014). College faculty interact with students on a daily basis and are more likely to hear from a student in distress than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, they are uniquely positioned to recognize and refer students to mental health professionals. Based on the theory of planned behavior (Azjen, 1991) it can be seen likely that faculty members' intentions to refer students with mental health concerns to a mental health professional may be impacted by their attitudes, subjective norms, and perceived behavioral control. Using the TPB as the conceptual framework for this study allowed for exploration of the belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional.

This chapter discusses the results of data collected from faculty regarding referral-related beliefs and intentions. The chapter has been organized into four sections. The first section reports the descriptive statistics of the demographic characteristics of faculty and the theory of planned behavior variables. The second section presents the correlational analysis to examine the relationships between variables. Following, I answer the first research question regarding the belief-related predictors of faculty members' intentions to refer students using multiple linear regression. From there, I answer the second research question regarding if faculty demographics are related to the intentions to refer students also using multiple linear regression. The chapter concludes with a brief summary of the findings.

Descriptive Statistics

Demographics

The descriptive statistics for the demographic independent variables in the study are presented in Table 2. Data collected were faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race. The respondents were 149 faculty members at a single, Midwestern public four-year university. There were 101 females (67.8%) and 48 males (32.2%) in the sample, of which 1.3% were aged 20 to 24, 11.4% were aged 25 to 34, 23.5% were aged 35 to 44, 26.2% were aged 45 to 54, 31.5% were aged 55 to 64, and 6% were aged 65 or above. In regards to race, 88.6% were White (n = 132) and 11.4% were non-White (n = 17). Respondents consisted of 29.5% who had been teaching a total of 0 to 5 years, 20.8% taught 6 to 10 years, 14.1% taught 11 to 15 years, and 35.6% taught 16 or more years. In terms of academic disciplines of faculty appointments, 22.1% were in the social sciences (n = 33), 10.1% were in natural sciences (n = 15), 4.7% were in math and computer sciences (n = 7), 6.7% were in humanities (n = 10), 4.7% were in the arts (n = 7), 22.1% were in education (n = 33), 4% were in business and finance (n = 6), 0.7% were in engineering (n = 1), and 24.8% were in health sciences and medicine (n = 37). The faculty ranks of those that responded were 43 (28.9%) were full professors, 28 (18.8%) were associate professors, 43 (28.9%) were assistant professors, 16 (10.7%) were instructors, and 19 (12.8%) were adjuncts. Faculty reported obtaining various sources of knowledge regarding mental health concerns. Fifty-five percent of faculty had formal education on mental health concerns (n = 82), 57% had been to trainings or workshops (n = 85), 61.1% had personal experience with mental health concerns (n = 91), 63.8% had family, friends, or coworkers with mental health concerns (n

= 95), 61.1% had professional experience assisting those with mental health concerns (*n* = 91), and 32.9% had obtained knowledge from the media (*n* = 49).

Table 2

Descriptive Statistics for Demographic Independent Variables

Independent Variable	Total (*N*)	*n*	%
Gender	149		
Male		48	32.2
Female		101	67.8
Age	149		
20-24		2	1.3
25-34		17	11.4
35-44		35	23.5
45-54		39	26.2
55-64		47	31.5
65+		9	6
Race	149		
White/Caucasian		132	88.6
Non-White		17	11.4
African Amer.		4	2.7
Hispanic		2	1.3
Asian		3	2
Pacific Islander		2	1.3
Native Amer.		5	3.4
Yrs. of Teaching Exp.	149		
0-5		44	29.5
6-10		31	20.8
11-15		21	14.1
16+		53	35.6
Faculty Rank	149		
Full Professor		43	28.9
Associate Prof.		28	18.8
Assistant Prof.		43	28.9
Instructor		16	10.7
Adjunct		19	12.8
Academic Discipline	149		
Social Sciences		33	22.1
Natural Sciences		15	10.1
Math/Computer		7	4.7
Humanities		10	6.7
Arts		7	4.7
Education		33	22.1
Business/Finance		6	4
Engineering		1	0.7
Health/Medicine		37	24.8
Sources of Mental			
Health Knowledge *	149		
Formal Education		82	55
Trainings/Workshops		85	57
Personal Experience		91	61.1
Family/Friend/Cwrk		95	63.8
Professional Exper.		91	61.1
Media		49	32.9

*Note. *Respondents could indicate more than one source for obtaining knowledge*

To summarize, the majority of faculty respondents were females and Caucasian. Most faculty who responded were assistant or full professors. Faculty identified the academic disciplines of health sciences, social sciences, and education most frequently. Additionally, faculty obtained most knowledge regarding mental health from personal experience or experience with others who have had mental health concerns.

Belief-Related Predictors

The descriptive statistics for the theory of planned behavior belief-related predictors (attitudes, subjective norms, and perceived behavioral control) independent variables and the single dependent variable (intention to refer) are presented in Table 3. The means and standard deviations were obtained for each of the four subscales of the modified Theory of Planned Behavior Questionnaire. Each subscale included several survey questions, scored on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). The attitudes subscale included 11 items (#1-11), subjective norms subscale included 5 items (#12-16), perceived behavioral norms subscale included 5 items (#17, 18, 20-22), and intentions to refer subscale included 4 items (#23-25).

Table 3

Descriptive Statistics for TPB Variables

Variable	*M*	*SD*	*N*
Independent			
Attitudes	5.35	0.84	149
Subjective Norms	5.88	1.09	149
Perceived Behavioral Control	4.67	1.3	149
Dependent			
Intentions to Refer	5.75	1.15	149

The mean scores of each of the four subscales were used for analyses. The higher subscale scores represented more positive attitudes, more favorable subjective norms, the perception of more personal control, and higher intentions to refer students.

Additional Responses

I collected additional data from faculty that was of interest to the implications of my findings. Tables 4 through 6 depict the descriptive statistics for the additional responses of interest. The number of faculty who have referred a student in the past with mental health concerns to a mental health professional is presented in Table 4. Of the faculty respondents, 117 (78.5%) had referred a student in the past to a mental health professional. Only 32 (21.5%) had never referred a student with mental health concerns.

Table 4

Frequency of Faculty who have Referred Students in the Past

Have you ever referred a student to a mental health professional?	*n*	Percent (%)
Yes	117	78.5
No	32	21.5

The percentage of faculty awareness of places to refer students, awareness of campus guidelines and procedures to be followed, and knowledge to recognize and refer students (Questions #20, #21, and #22) are presented in Table 5. Question number 20 is, "I am aware of a number of places where I could refer a student with mental health concerns to a mental health professional." Question number 21 is, "I am aware of the campus guidelines and procedures to

be followed to refer a student with mental health concerns to a mental health professional." Question number 22 is, "I have the knowledge necessary to recognize mental health concerns in students and make a referral to a mental health professional." All three questions were scored on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). Of the faculty respondents on question number 20, 66.5% somewhat agreed, agreed, or strongly agreed that they were aware of a number of places to refer students. Slightly over one-fourth (29.6%) of faculty indicated they strongly disagreed, disagreed, or somewhat disagreed they were aware of a number of places to refer students. For question number 21, faculty were evenly divided of being aware of campus guidelines and procedures to be followed when referring students. Forty-three percent (43.7%) of respondents somewhat agreed, agreed, or strongly agreed and 44.3% strongly disagreed, disagreed, or somewhat disagreed of being aware of campus guidelines and procedures. Of faculty responses on question number 22, 65.1% somewhat agreed, agreed, or strongly agreed they had the knowledge necessary to recognize mental health concerns and make a referral. Only 25.5% indicated they strongly disagreed, disagreed, or somewhat disagreed having the necessary knowledge to identify and refer students.

Table 5

Responses to Questions 20, 21, and 22 (N=149)

Survey Item	*M*	*SD*	N	% of Strongly Disagree	% of Disagree	% of Somewhat Disagree	% of Neither Agree or Disagree	% of Somewhat Agree	% of Agree	% Strongly Agree
#20. Aware of places to refer students	4.77	1.79	149	3.4	13.4	12.8	4	24.2	24.2	18.1
#21. Aware of campus guidelines and procedures	4	1.8	149	10.1	17.4	16.8	12.1	21.5	14.8	7.4
#22. Have knowledge to recognize mental health concerns	4.85	1.83	149	6.7	6.7	12.1	9.4	22.8	19.5	22.8

The percentage of faculty who desired information about mental health concerns, including their preferred formats for the information is presented in Table 6. The most preferred format was workshops (64.4%) through conferences or faculty development trainings, followed by written literature (53.7%). Slightly less than half (43%) of respondents preferred online trainings/videos and 39.6% preferred talking to a specialist.

Table 6

Frequency of Preferred Formats for Information about Mental Health Concerns

Format*	Percent (%)
Workshop (conference, faculty development training)	64.4
Written Literature	53.7
Talking to a Specialist	39.6
Online Trainings/videos	43

*Note. *Respondents could indicate more than one preferred format for information*

In summary, the majority of faculty respondents had referred a student in the past to a mental health professional, felt they had sufficient knowledge of mental health concerns, and were aware of a number of places to refer students. Additionally, faculty were evenly divided of being aware of campus guidelines and procedures to be followed when referring students. Faculty who desired for more information about mental health concerns indicated their preferred formats for the education was primarily through workshops followed by written literature.

Summary of Descriptive Statistics

The descriptive statistics of faculty demographics provide detail characteristics of those who participated in the study. The majority of faculty respondents were females and Caucasian. Most faculty respondents had referred a student in the past to a mental health professional, felt they had sufficient knowledge of mental health concerns, and were aware of a number of places to refer students. Also, faculty members prefer mental health education through workshops and written literature. Although these additional data from faculty did not answer the research questions, they were of interest to the implications of my findings and helps guide future research.

Correlations Between Demographic and Belief-Related Predictors

Before examining the research questions, I performed correlational analyses to examine the relationships among variables. Calculating the correlation coefficients provides an indication of the magnitude of the relationship between variables. If variables are strongly correlated with each other multicollinearity is possible, which leads to errors in regression models (Field, 2013). A correlation matrix between all variables showed that 45 of the 120 correlation coefficients were statistically significant at the $p < .05$ level or less. Table 7 presents the correlation matrix.

The results showed low to moderate relationships between the variables. All correlations among the variables were below .70, indicating a low likelihood of multicollinearity between variables (Field, 2013).

Demographic Variables

Several faculty demographic and independent variables showed significant relationships. Gender was associated with several variables: age ($r = .199$, $p < .05$), years of teaching experience ($r = .188$, $p < .05$), faculty rank ($r = .213$, $p < .01$), mental health knowledge from formal education ($r = -.358$, $p < .01$), mental health knowledge from family/friends/coworkers experience ($r = -.257$, $p < .01$), mental health knowledge from professional experience ($r = -.304$, $p < .01$), and attitudes ($r = -.203$, $p < .05$). Age was associated with years of teaching experience ($r = .594$, $p < .01$) and faculty rank ($r = .171$, $p < .05$). White and non-White faculty were associated with mental health knowledge from formal education ($r = .185$, $p < .05$), knowledge from workshops ($r = .243$, $p < .01$), and knowledge from professional experience ($r = .190$, $p < .05$). Years of teaching experience were related to mental health knowledge from formal education ($r = -.202$, $p < .05$) and knowledge from media ($r = -.164$, $p < .05$). Faculty rank was associated with mental health knowledge from personal experience ($r = .175$, $p < .05$). Academic discipline of faculty appointments was related to mental health knowledge from formal education ($r = -.195$, $p < .05$).

Sources of Mental Health Knowledge

Several faculty members' sources of mental health knowledge showed significant relationships. Faculty mental health knowledge from formal education was associated with attitudes ($r = .404$, $p < .01$), subjective norms ($r = .225$, $p < .01$), perceived behavioral control (*r*

= .426, $p < .01$), and intentions to refer ($r = .249$, $p < .01$). Faculty mental health knowledge from workshops was related to attitudes ($r = .346$, $p < .01$), subjective norms ($r = .255$, $p < .01$), perceived behavioral control ($r = .422$, $p < .01$), and intentions to refer ($r = .236$, $p < .01$). Additionally, faculty mental health knowledge from professional experience was associated with attitudes ($r = .387$, $p < .01$), subjective norms ($r = .249$, $p < .01$), perceived behavioral control ($r = .470$, $p < .01$), and intentions to refer ($r = .328$, $p < .01$). Mental health knowledge from personal experience with mental health conditions was related to attitudes ($r = .260$, $p < .01$), perceived behavioral control ($r = .168$, $p < .05$), and intentions to refer ($r = .197$, $p < .05$). Faculty mental health knowledge from family/friends/coworkers experience with mental health was associated with attitudes ($r = .215$, $p < .01$) and intentions to refer ($r = .228$, $p < .01$).

Table 7

Correlation Matrix Among Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender	----															
2. Age	.199*	----														
3. White or Non-White	-.159	-.129	----													
4. Years of Teaching	.188*	.594**	-.111	-----												
5. Faculty Rank	.213**	.171*	-.099	.159	-----											
6. Academic Discipline	-.126	.062	.101	-.002	.088	-----										
7. Knowledge from Formal Education	-.358**	-.029	.185*	-.202*	-.151	.195*	-----									
8. Knowledge from Workshops	-.156	-038	.243**	-.015	-.033	.022	.306**	-----								
9. Knowledge from Personal Experience	-.068	-.105	.060	-.096	.175*	-.155	.053	.114	------							
10. Knowledge from Family, Friends, Coworker Experience	-.257**	-.127	.081	-.066	-.023	-.212	-.008	.051	.400**	-----						
11. Knowledge from Professional Experience	-.304**	-.046	.190*	-.118	-.085	.123	.579**	.336**	.238**	.057	-----					
12. Knowledge from Media	-.085	-.204	-.018	-.164*	-.118	-.087	.001	-.028	.031	.260**	-.056	-----				
13. Attitudes	-.203*	-.069	.147	-.051	.067	-.015	.404**	.346**	.260**	.215**	.387**	-.044	-----			
14. Subjective Norms	-.054	-.002	.161	-.041	.002	.119	.225**	.255**	.136	.075	.249**	.016	.599**	-----		
15. Perceived Behavioral Control	-.156	.095	.142	-.043	.000	-.053	.426**	.422**	.168*	.064	.470**	-.104	.691**	.519**	-----	
16. Intentions to Refer	-.136	.041	;.125	-.002	.020	.062	.249**	.236**	.197*	.228**	.328**	.065	.643**	.638**	.546**	-----

Note. **p* < .05. ***p* < .01.

Belief-Related Predictors

Correlational analyses were also performed to examine the relationships among the theory of planned behavior belief-related predictors (attitudes, subjective norms, and perceived behavioral control). Table 8 presents the results showing moderate relationships that were statistically significant at the $p < .01$ level between the variables. All correlations among the variables were below .70, indicating a low likelihood of multicollinearity between variables (Field, 2013).

Table 8

Correlations Among Theory of Planned Behavior Variables

TPB Variables	1	2	3	4
1. Attitudes	-----			
2. Subjective Norms	.599**	------		
3. Perceived Control	.691**	.519**	------	
4. Intentions to Refer	.643**	.638**	.546**	------

Note. $^{**}p < .01$.

Summary of Correlations Between Variables

A correlation matrix between all variables showed that 45 of the 120 correlation coefficients were statistically significant at the $p < .05$ level or less. The results showed low to moderate relationships between the variables. All correlations among the variables were below .70, indicating a low likelihood of multicollinearity between variables (Field, 2013). Calculating the correlation coefficients ensured the variables were suitable for regression analysis, which allow for examination of the research questions.

Analyses of Demographic and Belief-Related Predictors on Intention to Refer

After calculating correlations to ensure variables were not strongly related, I used multiple linear regression to determine if the demographic variables contributed to the statistical prediction of the intention to refer students to mental health professionals. I also conducted multiple linear regression to determine if attitudes, subjective norms, and perceived behavioral control contributed to the prediction of intention to refer. This allowed me to examine the two research questions and reject or accept the associated hypotheses.

Assumptions of Multiple Linear Regression

Before beginning hypothesis testing, I examined underlying assumptions of multiple linear regression to ensure the data were suitable. An analysis of standard residuals was carried out, which showed a standard residual minimum value of -3.45 and a standard residual maximum value of 2.56, which indicated potential outliers (Field, 2013). To further examine outliers and influential cases I analyzed standardized DfBetas. Results of descriptive statistics of DfBetas revealed no large standardized DfBetas of less than -2 or greater than 2; therefore verifying the dataset does not include concerning outliers or influential cases. Tests to see if data met the assumption of collinearity indicated that multicollinearity was not a concern for the variables as the VIF's were below 10 and tolerance were greater than .1 (Field, 2013). The data met the assumption of independent errors as the Durbin-Watson value was 1.79 (Field, 2013). The histogram of standardized residuals indicated the data contained normally distributed errors (see Figure 2), as did the normal P-P plot of standardized residuals, which showed points close to the line (see Figure 3). The scatterplot of standardized residuals showed the data met the assumptions of homogeneity of variance and linearity (see Figure 4).

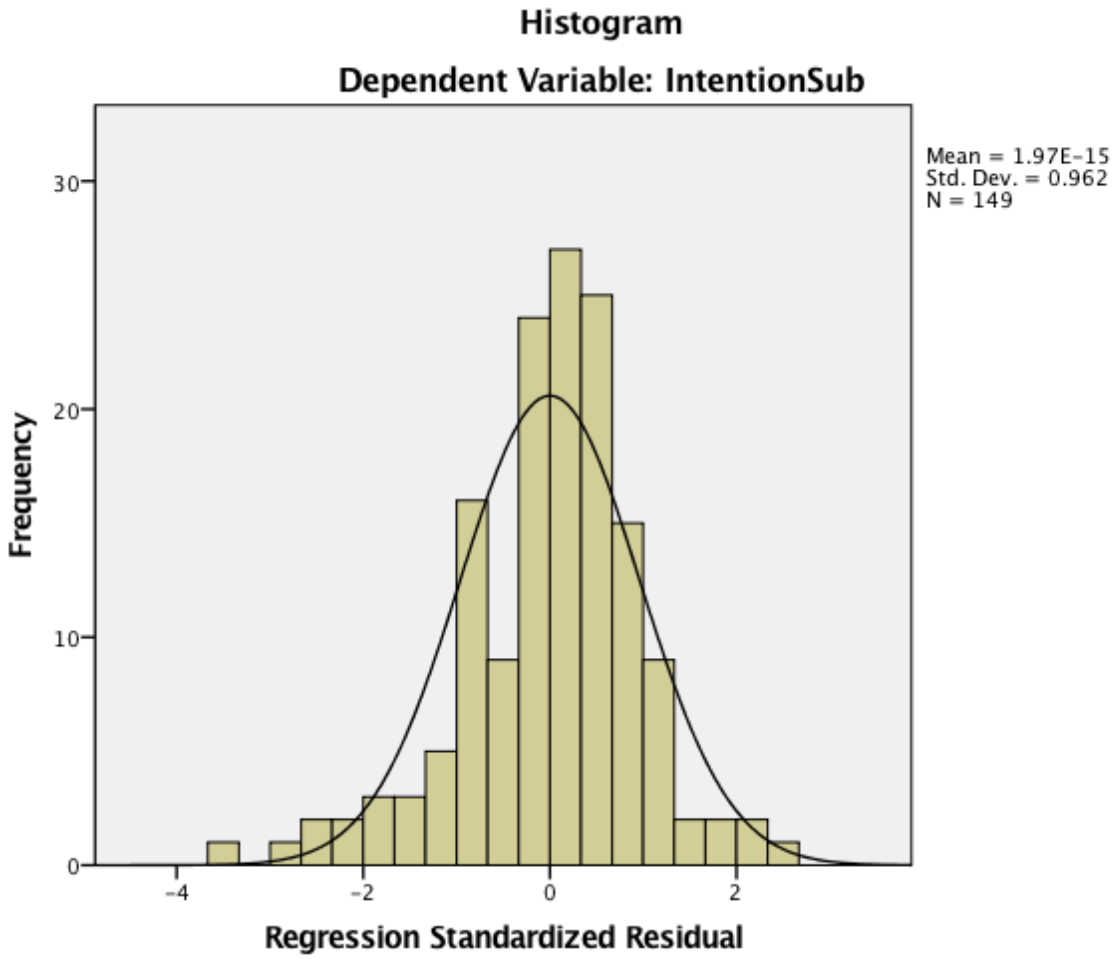

Figure 2. Histogram of standardized residuals indicated the data contained normally distributed errors.

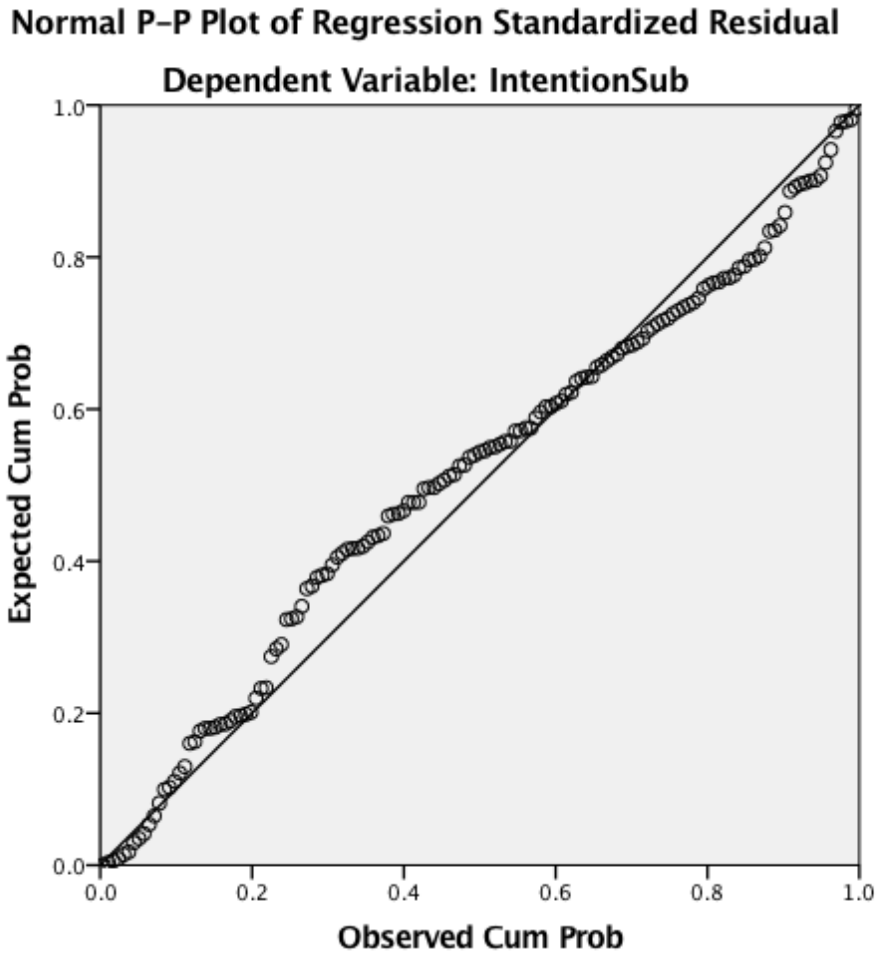

Figure 3. Normal P-P plot of standardized residuals, which showed points close to the line.

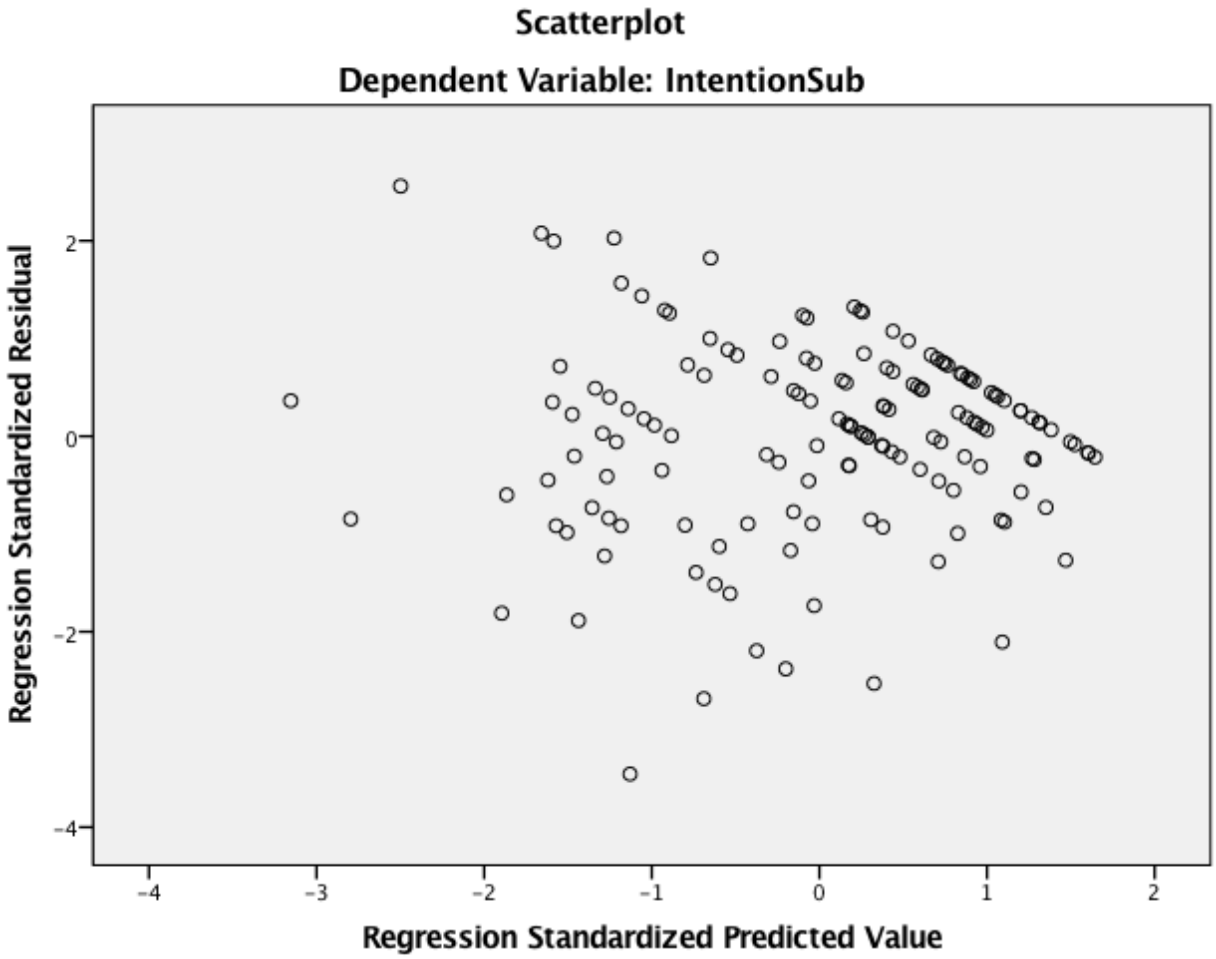

Figure 4. Scatterplot of standardized residuals showed the data met the assumptions of homogeneity of variance and linearity.

To summarize, testing assumptions of multiple linear regression ensures data is suitable for regression analysis. The results of checking linearity, homoscedasticity, normality of residuals, independent errors, presence of outliers, and collinearity showed no assumptions were violated. Therefore, I used multiple linear regression to determine if faculty demographics and belief-related predictor variables contributed to the statistical prediction of faculty intentions to refer students to mental health professionals.

Research Question 1: Belief-Related Predictors

The first research question asked, "What are the belief-related predictors (attitudes, subjective norms, and perceived behavioral control) of faculty members' intentions to refer students with mental health concerns to mental health professionals?" To examine the first research question, I performed a multiple linear regression to see if attitudes, subjective norms, and perceived behavioral control predicted faculty intentions to refer students. As shown in Table 9, the results of a regression of the three belief-related predictors on intentions to refer students was significant, $F(3, 145) = 52.393$, $p < .001$. The multiple correlation coefficient was .72, indicating that the model explained 52% of the variance of the intention to refer. Further analysis shows that perceived behavioral control ($\beta = .119$, $p > .05$) did not significantly predict intention to refer; however attitudes ($\beta = .336$, $p < .001$) and subjective norms ($\beta = .375$, $p < .001$) did predict intentions to refer students to mental health professionals.

Table 9

Regression Analysis of Belief-Related Predictors on Intention to Refer

Model	*R*	R^2	Adj. R^2	*F*	Sig.
	.721	.520	.510	52.393	.000
Predictors		β	*SE* B	*t*	Sig.
Attitudes		.336	.119	3.892	.000
Subjective Norms		.375	.077	5.134	.000
Perceived Behavioral Control		.119	.072	1.469	.144

Based on these results I rejected two null hypotheses and accepted two alternative hypotheses listed below:

H_{o1}. There is no significant difference between faculty members' *attitudes* and intentions to refer students with mental health concerns to mental health professionals.

H_{a1}. Faculty members' *attitudes* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o2}. There is no significant difference between faculty members' *subjective norms* and intentions to refer students with mental health concerns to mental health professionals.

H_{a2}. Faculty members' *subjective norms* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

Also based on these findings, I failed to reject the null hypothesis and did not accept the alternate hypothesis below:

H_{o3}. There is no significant difference between faculty members' *perceived behavioral control* and intentions to refer students with mental health concerns to mental health professionals.

H_{a3}. Faculty members' *perceived behavioral control* will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

In summary, results of multiple linear regressions revealed faculty members' attitudes and subjective norms are significant predictors of intentions to refer students with mental health concerns to mental health professionals. Further analysis showed faculty members' subjective

norms were the most significant belief-related predictor, followed closely by attitudes towards referring students to mental health professionals. Faculty members' perceived behavioral control was not significant at predicting intention to refer students.

Research Question 2: Demographics and Professional Experiences

The second research question asked, "What differences exist in intentions to refer students with mental health concerns to mental health professionals based on faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race?" To examine the second research question, I initially performed a stepwise multiple regression for exploratory purposes. Results of the stepwise multiple regression showed what combination of predictor variables best predicted faculty intentions to refer students. Following a stepwise regression, I conducted three separate multiple linear regressions. The first model included demographic variables (gender, age, and race) only, the second model included professional experience variables (rank, years of teaching, math/science discipline, knowledge from professional experience, and knowledge from family/friends/coworkers experience) only, and the third model included all variables: demographics, professional experience, and belief-related predictors (attitudes, subjective norms, and perceived behavioral control).

Stepwise for exploration. I performed a stepwise multiple regression to explore and identify the variables that significantly predicted faculty intentions to refer students. This allowed me to reduce the number of variables in the final model to find the best combination for statistical prediction. The significant results of the stepwise multiple regression are presented in Table 10. The independent variables included age, gender, race (White or non-White), years of

teaching experience, academic rank (professor or instructor), academic disciplines (9 dummy variables), and sources of mental health knowledge (5 dummy variables). An analysis of the stepwise regression revealed three variables predicted intention to refer students: sources of mental health knowledge from professional experience, sources of mental health knowledge from family/friends/coworkers, and academic disciplines of math and computer sciences. At step 1 of the analysis, mental health knowledge from professional experience entered into the regression equation and was significantly related to intention to refer $F(1, 147) = 17.741$, $p < .001$. The multiple correlation coefficient was .328, indicating that the model explained 10.8% of the variance of the intention to refer. At step 2 mental health knowledge from family, friends, and coworkers experience entered into the regression equation and was significantly related to intention to refer $F(2, 146) = 13.042$, $p < .001$. The multiple correlation coefficient was .389, indicating that the model explained 15.2% of the variance of the intention to refer. At the final step, academic discipline of math and computer sciences entered into the regression equation and was significantly related to intention to refer $F(3, 14) = 10.770$, $p < .001$. The multiple correlation coefficient was .427, indicating that the model explained 18.2% of the variance of the intention to refer. All other predictor demographic variables did not significantly influence intentions to refer.

Table 10

Significant Predictor Variables in the Stepwise Regression Analysis

Model	Predictor Variables	R	R^2	Adj. R^2	F	Sig.	β	*SE* B	t	Sig.
1		.328	.108	.102	17.741	.000				
	Knowledge of MH from Professional Experience						.336	.184	4.212	.000
2		.389	.152	.140	13.042	.000				
	Knowledge of MH from Professional Experience						.316	.181	4.142	.000
	Knowledge of MH from Family/Friend/Coworker Experience						.210	.183	2.748	.007
3		.427	.182	.165	10.770	.000				
	Knowledge of MH from Professional Experience						.276	.183	3.569	.000
	Knowledge of MH from Family/Friend/Coworker Experience						.243	.184	3.171	.002
	Disciplines of Math and Computer Science						-.182	.427	-2.331	.021

Model 1: demographic variables. Following a stepwise regression, I conducted three separate multiple linear regressions. The first model included demographic variables (gender, age, and race) only. The results from the first model are in Table 11, which shows the three demographic variables on intention to refer were non-significant, $F(3, 145) = 1.810$, $p > .05$. Faculty member's gender ($\beta = -.135, p > .05$), age ($\beta = .083, p > .05$), and race ($\beta = .115, p > .05$) did not influence faculty intentions to refer students to mental health professionals.

Table 11

Regression Analysis of Gender, Age, and Race on Intention to Refer

Model	R	R^2	Adj. R^2	F	Sig.
1	.190	.036	.016	1.810	.148
Predictors		β	*SE* B	t	Sig.
Gender		-.135	.208	-1.602	.111
Age		.083	.083	.987	.325
White and non-White		.115	.301	1.380	.170

Model 2: professional experience variables. The second model included professional experience variables (rank, years of teaching, math/computer science discipline, knowledge from professional experience, and knowledge from family/friends/coworkers experience) only. The results from the second model are in Table 12, which shows professional experience predictors on intentions to refer students was significant, $F(5, 143) = 6.515$, $p < .001$. The multiple correlation coefficient was .431, indicating that the model explained 18.6% of the variance of the intention to refer. Further analysis shows that instructor rank ($\beta = .039, p > .05$) and years of teaching experience ($\beta = .038, p > .05$) did not significantly predict intention to refer; however math/computer science discipline ($\beta =$ -.179, $p < .05$), mental health knowledge from family/friends/coworkers ($\beta = .245$, $p < .05$), and mental health knowledge from professional experience ($\beta = .284, p < .001$) did predict intentions to refer students to mental health professionals. Faculty from math and computer science disciplines were significantly less likely to refer students than faculty from other academic disciplines. Additionally, faculty with prior mental health knowledge from professional experience was the most significant demographic

variable predictor, followed closely by prior knowledge from family, friends, and coworkers experience with mental health concerns.

Table 12

Regression Analysis of Professional Experience Variables on Intention to Refer

Model	*R*	R^2	Adj. R^2	*F*	Sig.
2	.431	.186	157	6.515	.000
Predictors		β	*SE* B	*t*	Sig.
Rank		.039	.209	.510	.611
Years of Teaching Experience		.038	.071	.487	.627
Math and Computer Science Discipline		-.179	.429	-2.274	.024
Knowledge of MH from Professional Experience		.284	.186	3.522	.000
Knowledge of MH from Family/Friend/Coworker Experience		.245	.184	3.181	.002

Model 3: demographics, professional experience, and belief-related variables. The results from the third model, which included all variables: demographics, professional experience, and belief-related predictors (attitude, subjective norms, and perceived behavioral control) are presented in Table 13. Findings indicated the third regression model was significant, $F(11, 137) = 15.387$, $p < .001$. The multiple correlation coefficient was .743, indicating that the model explained 55.3% of the variance of the intention to refer. Further analysis showed three predictor variables were significant: attitudes ($\beta = .276, p < .05$), subjective norms ($\beta = .372, p < .001$), and mental health knowledge from family/friends/coworkers ($\beta = .155, p <$

.05). Faculty members' subjective norms were the most significant predictor of intentions to refer, followed by faculty attitudes towards referring students, and lastly prior mental health knowledge from family, friends, and coworkers experience with mental health concerns. All other predictor variables in the third model did not significantly influence intentions to refer.

Table 13

Regression Analysis of Demographic, Professional Experience, and Belief-Related Predictors on Intention to Refer

Model	*R*	*R2*	Adj. *R*2	*F*	Sig.
3	.743	.553	.517	15.387	.000

Category	Predictors	*B*	*SE* B	*t*	Sig.
Demographic	Gender	.008	.160	.118	.907
	Age	*.033*	*.077*	*.431*	.667
	White and non-White	*-.008*	*.215*	*-.141*	.888
	Rank	-.006	.163	-.108	.914
	Years of Teaching Experience	.025	.068	.342	.733
	Math and Computer Science Discipline	-.104	.344	-1.652	.101
Source of MH Knowledge	Knowledge of MH from Professional Experience	.048	.164	.693	.489
	Knowledge of MH from Family/Friend/Coworker Experience	.155	.149	2.511	.013
Independent Variables	Attitudes	.276	.127	2.981	.003
	Subjective Norms	.372	.078	5.041	.000
	Perceived Behavioral Control	.122	.079	1.370	.173

Based on these results I rejected two null hypotheses and accepted two alternative hypotheses listed below:

H_{o5}. There is no significant difference between faculty members' academic discipline and intentions to refer students with mental health concerns to mental health professionals.

H_{a5}. Faculty members' academic discipline will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o7}. There is no significant difference between faculty members' sources of mental health knowledge and intentions to refer students with mental health concerns to mental health professionals.

H_{a7}. Faculty members' sources of mental health knowledge will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

Also based on these findings, I failed to reject the null hypothesis and did not accept the following alternate hypotheses:

H_{o4}. There is no significant difference between faculty members' rank and intentions to refer students with mental health concerns to mental health professionals.

H_{a4}. Faculty members' rank will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o6}. There is no significant difference between faculty members' years of teaching experience and intentions to refer students with mental health concerns to mental health professionals.

H_{a6}. Faculty members' years of teaching experience will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o8}. There is no significant difference between faculty members' gender and intentions to refer students with mental health concerns to mental health professionals.

H_{a8}. Faculty members' gender will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o9}. There is no significant difference between faculty members' age and intentions to refer students with mental health concerns to mental health professionals.

H_{a9}. Faculty members' age will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

H_{o10}. There is no significant difference between faculty members' race and intentions to refer students with mental health concerns to mental health professionals.

H_{a10}. Faculty members' race will be a significant predictor of intentions to refer students with mental health concerns to mental health professionals.

In summary, results of multiple linear regressions revealed faculty members' academic discipline and sources of prior mental health knowledge are significant predictors of intentions to refer students with mental health concerns to mental health professionals. Further analysis showed faculty from math and computer science disciplines were significantly less likely to refer

students than faculty from other academic disciplines. Additionally, faculty with prior mental health knowledge from professional experience was the most significant demographic predictor, followed closely by prior knowledge from family, friends, and coworkers experience with mental health concerns. No significant differences were found in intentions to refer students based on faculty members' age, gender, race, academic rank, or years of teaching experience.

Summary

This study examined the belief-based predictors (attitudes, subjective norms, and perceive behavioral control) of faculty members' intentions to refer students with mental health concerns to a mental health professional. The study also investigated if there were significant differences between faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race regarding intentions to refer students. Results of multiple linear regressions revealed faculty members' attitudes and subjective norms are significant predictors of intentions to refer students with mental health concerns to mental health professionals. Additionally, faculty with knowledge of mental health concerns from professional, family, friends, and coworkers experience with mental health concerns are significant predictors of intentions to refer students. Lastly, faculty from math and computer science disciplines are significantly less likely to refer students with mental health concerns than faculty from other academic disciplines. There were no significant differences in intentions to refer students based on faculty members' age, gender, race, academic rank, years of teaching experience, or perceived behavioral control. The two research questions, associated null hypotheses, and answers are summarized in Table 14.

Table 14

Summary of Research Questions, Null Hypotheses, and Answers

Question	Null Hypothesis	Reject/Fail to Reject	Answer to Question
What are the belief-related predictors (attitudes, subjective norms, and perceived behavioral control) of faculty members' intentions to refer students with mental health concerns to mental health professionals?	There is no significant difference between faculty members' attitudes and intentions to refer students.	Reject	Faculty members' attitudes are a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' subjective norms and intentions to refer students.	Reject	Faculty members' subjective norms are a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' perceived behavioral control and intentions to refer students.	Fail to Reject	Faculty members' perceived behavioral control is not a significant predictor of faculty intentions to refer students with mental health concerns.
What differences exist in intentions to refer students with mental health concerns to mental health professionals based on faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender age, and race?	There is no significant difference between faculty members' rank and intentions to refer students.	Fail to Reject	Faculty members' rank is not a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' academic discipline and intentions to refer students.	Reject	Faculty members' academic discipline is a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' years of teaching experience and intentions to refer students.	Fail to Reject	Faculty members' years of teaching experience is not a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' sources of mental health knowledge and intentions to refer students.	Reject	Faculty members' sources of mental health knowledge are a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' gender and intentions to refer students.	Fail to Reject	Faculty members' gender is not a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' age and intentions to refer students.	Fail to Reject	Faculty members' age is not a significant predictor of faculty intentions to refer students with mental health concerns.
	There is no significant difference between faculty members' race and intentions to refer students.	Fail to Reject	Faculty members' race is not a significant predictor of faculty intentions to refer students with mental health concerns.

Descriptive statistics presented the number of faculty who have referred a student in the past and the percentage of faculty who desired information about mental health concerns and their preferred formats for the information. Data were also presented regarding faculty awareness of places to refer students, awareness of campus guidelines and procedures to be followed, and knowledge to recognize and refer students with mental health concerns. These data were of interest to this study to strengthen and enhance the implications of the results and help guide future research.

Conclusions, discussion of findings, and limitations of this study will be addressed in chapter 5. Also, implications for research, theory, and practice will be discussed.

Chapter V: Discussion

College students' mental health has become critically important in recent years after violent acts at Columbine High School, Virginia Tech University, and Northern Illinois University (Kraft, 2011). Several scholars report the number of college students suffering from depression and suicidal thoughts is increasing (American College Health Association, 2014; Hunt & Eisenberg, 2010). College students with mental health concerns face many academic challenges and engagement stressors (Salzer, 2012). They have lower grade point averages, face social isolation, are less engaged on campus, have poorer relationships, and experience discrimination more often than students without a mental illness, which are related to lower graduation rates (Blacklock et al., 2003; Eisenberg et al., 2009; Salzer, 2012).

Faculty and student interactions outside of the classroom can positively affect students' intellectual development, personal growth, learning outcomes, persistence, and degree completion (Astin, 1993; Kuh & Hu, 2001; Pascarella & Terenzini, 2005; Tinto, 1993). Despite the benefits of student interactions, some faculty have negative attitudes, lack knowledge, and have discomfort towards students with mental illnesses (Becker et al., 2002; Brockelman et al., 2006; Sniatecki et al., 2015). Several researchers have shown faculty experiences, perceptions, attitudes, and comfort levels may be related to faculty interactions with students who have mental health concerns (Backels & Wheeler, 2001; Becker et al., 2002; Brockelman et al., 2006).

In response to tragic incidents on campuses and staggering research findings, higher education institutions have begun to implement campus-wide mental health promotion and suicide prevention strategies (Kraft, 2011). One campus-wide strategy to promote students' mental health is to educate campus gatekeepers about recognizing signs of mental health

concerns (Wallack et al., 2013). College faculty interact with students on a daily basis and are more likely to hear from a student with mental health concerns than a college counseling center staff member (National Alliance on Mental Illness, 2012); therefore, they are uniquely positioned to recognize and support students with mental health concerns.

Gatekeeper training has been shown to be effective at increasing knowledge and skills (Isaac et al., 2009; Pasco et al., 2012), but researchers have found knowledge and skills are not the only factors that play a role in referring students to mental health professionals (Becker et al., 2002; Lee, 2014; Schwartz, 2010; Servaty-Seib et al., 2013). Servaty-Seib et al. (2013) found that resident assistants' intentions to refer were influenced by their beliefs related to subjective norms and their self-efficacy in making a referral. Lee's (2014) results showed among U.S. teachers' favorable attitude, perceived approval from others, and higher control predicted their intentions to refer students. Schwartz's (2010) findings revealed higher education faculty intentions were influenced by attitudes, subjective norms, and perceived behavioral control. Based on these studies, I questioned if faculty intentions to refer students to mental health professionals were influenced by their attitudes, perceived skills and abilities, the impact of other people, and/or demographic characteristics.

The purpose of this study was to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. To my knowledge, only three studies have explored this using quantitative approaches (Carr, 2011; Lee, 2014; Servaty-Seib et al., 2013). These studies explored resident assistants' (Servaty-Seib et al., 2013) and K-12 teachers' (Carr, 2011; Lee, 2014) referral intentions and it was my goal to identify predictors among faculty members.

This chapter discusses the findings of data collected from faculty regarding referral-related beliefs and intentions. The chapter has been organized into four sections. The first section reports the results in light of the literature review. The second section presents the limitations of the study and considerations for further research. Following, I discuss implications of the results for theory and research. The chapter concludes with recommendations for practice and a brief summary of the entire study.

Discussion

This study used non-experimental, quantitative research design to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. The participants were faculty members at a single, Midwestern public four-year university. Utilizing Ajzen's theory of planned behavior (TPB) as the theoretical grounding for this study allowed for exploration of the belief-based predictors of faculty intentions to refer students. The following research questions guided this study:

RQ1. What are the belief-related predictors (attitudes, subjective norms, and perceived behavioral control) of faculty members' intentions to refer students with mental health concerns to mental health professionals?

RQ2. What differences exist in intentions to refer students with mental health concerns to mental health professionals based on faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race?

The findings for both research questions and comparisons to existing research from the literature review are examined below.

Belief-Related Predictors

Results of multiple linear regressions revealed faculty members' attitudes are a significant predictor of intentions to refer students with mental health concerns to mental health professionals. Faculty members with positive attitudes towards referring are more likely to have intentions to refer students than faculty members with negative attitudes. My findings are in line with studies by Lee (2014) and Schwartz (2010). Lee (2014) found K-12 teachers' attitudes were predictive of teachers' intent to refer students. Additionally, Schwartz's (2010) results showed faculty intentions to respond to the acutely distressed college student was influenced by their attitudes. My results also revealed that faculty members' subjective norms are a significant predictor of intentions to refer students. Subjective norms are beliefs about whether or not important others would approve of their referring. These findings are consistent with Lee (2014), Schwartz (2010), and Servaty-Seib et al. (2013) who also found subjective norms to be predictive of intentions to refer. For the last theory of planned behavior predictor, I found no significant differences in intentions to refer students based on faculty members' perceived behavioral control. Perceived behavioral control is one's confidence and perception of the ease or difficulty of referring. This finding is inconsistent with Lee (2014), Servaty-Seib et al. (2013), and Schwartz (2010) who all found perceived behavioral control to contribute to the intention to refer. Despite the contradiction to previous studies, the model in this study explained 52% of the variance of faculty intentions to refer. Overall my study showed faculty members' subjective norms were the most significant belief-related predictor, followed closely by attitudes towards referring students to mental health professionals.

Demographic Predictors

The findings of this study for demographic variables were both similar and contrary to what other scholars have found. I found no significant differences in intentions to refer students based on faculty members' age, gender, race, academic rank, or years of teaching experience. King (2001) studied faculty demographics and willingness to accommodate students with mental health disabilities. Similar to my findings, King (2001) found no significant differences in gender, age, knowledge of policies, previous experience with persons with mental illness, or knowledge of campus resources. Easton and Van Laar (1995) also found no significant differences in gender, age, or years of teaching experience in regards to the frequency of faculty responding to distressed students. Contrary to my findings, Backels and Wheeler (2001) found female faculty and faculty with teaching experience over 15 years were more likely to refer students to mental health services.

Results of my regression analysis revealed faculty with prior knowledge of mental health concerns from professional, family, friends, and coworkers experience with mental health challenges are significant predictors of intentions to refer students. This is in line with the works of Burnette et al. (2015) and Chadsey and Loeb (2006). Burnette et al. (2015) found individual factors of having prior mental health knowledge and experience working with at-risk individuals was associated with increased likelihood of intervening with students. Similarly, Chadsey and Loeb's (2006) results indicated faculty with self-experience themselves having a psychiatric disability was the strongest predictor of confidence, perceptions, and comfort levels working with students with psychiatric disabilities. Although not as strong of a predictor as self-experience, faculty who had friends or previous students with psychiatric disabilities also had

greater confidence, perceptions, and comfort levels (Chadsey & Loeb, 2006). Overall my study showed faculty members' with prior knowledge of mental health concerns from professional experience was the most significant demographic variable predictor, followed closely by prior knowledge from family, friends, and coworkers experience with mental health concerns.

Becker et al. (2002) examined "faculty and student attitudes, beliefs, knowledge, and experiences with students identified as having a mental illness" (p. 359). There are several similarities and differences when comparing data from the current study to Becker et al.'s (2002) findings. They found significant differences in several demographic characteristics: gender, age, academic department affiliation, and years of teaching experience. Becker et al.'s (2002) results suggested female faculty members were more likely than male faculty to discuss concerns with students, convince students to seek help, consult with campus resources, and refer students to mental health services. Younger faculty members were also more likely to refer students to campus counseling. Unlike Becker et al.'s (2002) findings, faculty responses in my study did not support gender, age, or years of teaching experience as significant predictors of intentions to refer. On the other hand, my results did reveal faculty from math and computer science disciplines are significantly less likely to refer students; however, no other academic disciplines showed significant differences. Becker et al. (2002) also showed academic discipline impacted intentions, but they found "faculty in the health sciences made significantly fewer referrals and accommodations than faculty in arts and sciences, education, and business, who did not differ from one another" (Becker et al., 2002, p. 366).

Additional Responses of Interest

I collected additional data on survey responses from faculty that were of interest to the implications of my findings. I used descriptive statistics to present the number of faculty who have referred a student in the past and the percentage of faculty who desired information about mental health concerns and their preferred formats for the information. Data were also presented regarding faculty awareness of places to refer students, awareness of campus guidelines and procedures to be followed, and knowledge to recognize and refer students with mental health concerns.

In my study, 78.5% faculty respondents had referred a student in the past to a mental health professional. Only 21.5% of faculty had never referred a student with mental health concerns. These results are interesting as I expected a fewer number of faculty who had previously referred students to mental health professionals. Although, previous researchers Burnette et al. (2015) found that experience working with at-risk individuals is associated with increased likelihood of referring, which may explain the larger number of faculty respondents who have referred students in the past.

Of faculty responses on my survey, 65.1% somewhat agreed, agreed, or strongly agreed they had the knowledge necessary to recognize mental health concerns and make a referral. Only 25.5% indicated they strongly disagreed, disagreed, or somewhat disagreed having the necessary knowledge to identify and refer. These findings support Becker et al.'s (2002) findings that some faculty are not knowledgeable and have negative expectations for students with mental illness. Brockelman et al.'s, (2006) results showed the majority of faculty felt they did not have sufficient knowledge of mental illnesses and desired more training and awareness of resources.

Although the majority of faculty in my study felt they had the necessary mental health knowledge, one-fourth of respondents still did not feel they were knowledgeable. This suggests education is still needed on the topic of mental health concerns in college students.

Faculty respondents on my survey indicated 66.5% somewhat agreed, agreed, or strongly agreed they were aware of a number of places to refer students. However, slightly over one-fourth (29.6%) of faculty indicated they strongly disagreed, disagreed, or somewhat disagreed they were aware of a number of places to refer students. These results are an indication faculty need to be informed of several places to refer students who exhibit mental health concerns. Additionally, faculty who are not familiar with campus mental health services are less likely to discuss concerns with students, convince students to seek help, and refer students to counseling (Becker et al., 2002). Educating faculty about mental illnesses and campus resources would increase the likelihood of referrals.

Many faculty do not feel they have clear policies about how to respond to distressed students or adequate education about mental illnesses (Schwartz, 2010). My findings showed faculty were evenly divided of being aware of campus guidelines and procedures to be followed when referring students. Forty-three percent (43.7%) of respondents somewhat agreed, agreed, or strongly agreed and 44.3% strongly disagreed, disagreed, or somewhat disagreed of being aware of campus guidelines and procedures. Despite almost half of faculty being aware of campus procedures, it is concerning to me another half of faculty were not aware of campus guidelines. This exhibits the need to inform faculty members of institutional policies regarding students with mental health concerns. Clearer guidelines and procedures would create a more inclusive and supportive environment for students with mental illness (Quinn et al., 2009).

Faculty participants who desired information about mental health concerns indicated their preferred formats for the information. The majority of faculty preferred workshops (64.4%) through conferences or faculty development trainings, followed by written literature (53.7%). Slightly less than half (43%) of faculty respondents preferred online trainings/videos and 39.6% preferred talking to a specialist. These results suggest education through gatekeeper trainings on the topic of mental health concerns is an ideal format for faculty members. Providing gatekeeper training to faculty members can help in identifying at-risk students and assisting them in receiving early mental health treatment (Yufit & Lester, 2004).

The results of this study, in light of the literature review, offer guidance for the development of gatekeeper trainings and the importance of considering faculty belief-based predictors and characteristics. Future training programs need to not only focus on developing knowledge and skills, but also faculty subjective norms and attitudes about referring. Despite these findings, the implications of the results have to be examined considering the limitations of the study.

Limitations

This study has several limitations in terms of sampling, design, and instrumentation. The sample cannot be generalized to the larger population of faculty. The university chosen for the study was familiar to me due to my association with the institution; therefore, the convenience sampling is a limitation. Faculty at the university was easily accessible and convenient to recruit. The sample was not randomly selected; therefore, faculty who were more interested in mental health issues may have been more likely to complete the survey. In addition, the

demographics of the current sample are not representative of all faculty members; therefore, the generalizability of the findings must be viewed carefully.

Another limitation was the data collection procedures because questionnaires were completed online and self-report measures may be influenced by bias results. Additionally, there may have been a lack of understanding among participants despite a cover letter explaining the purpose of the study. The topic of students with mental health concerns can cover a vast array of student issues. Also, an overarching bias with this study and all attitudinal studies is the social desirability effect (Edwards, 1957). Social desirability is the tendency to present oneself in more positive light than actually is reality (Edwards, 1957). Therefore, respondents may minimize socially undesirable attitudes regarding students with mental health concerns, despite holding true to stigmatizing beliefs. This phenomenon is an unavoidable limitation of attitudinal studies; however, I used online anonymous surveys in anattempt to minimize this bias.

Another unavoidable limitation with survey research is the difference between the faculty respondents and non-respondent faculty members. To maximize the response rate, I sent out an initial recruitment email with one additional reminder to complete the survey. Despite these techniques, non-respondent faculty members may be less interested in the topic of mental health, less knowledgeable, refer students less, and hold more negative attitudes than faculty who responded to the survey. In addition, non-respondent faculty members may believe it is not their responsibility to refer students with mental health concerns, therefore did not respond to the survey.

The TPB Questionnaire is another limitation because it was modified to apply to faculty members rather than resident assistants. The adapted instrument was reviewed by a panel of

faculty and pilot tested, but because of the modification, this can be a potential weakness. Nevertheless, the modified measure showed excellent reliability on the intention to refer, attitudes, perceived behavioral control, and subjective norms subscales. Cronbach's alpha coefficients measuring internal consistency for the dependent variable intention to refer was excellent, $\alpha = .877$. Reliability for the three independent variable subscales was also very good: attitudes toward referral $\alpha = .867$, subjective norms $\alpha = .884$, and perceived behavioral control $\alpha = .824$. Although the modified TPB Questionnaire should be subjected to more rigorous testing such as factor analysis, to assess reliability before being used in future research (Field, 2013).

Another caution in my study was that the variables examined were highly correlated. It is possible that the multiple questions assessing the constructs and similar response choices led to participant fatigue. This may have led participants to have the same response patterns to different questions. These patterns would cause a lack of variability between the construct subscales causing high correlations.

Despite these limitations, there are several strengths to this study. To my knowledge, this was the first study to examine the theory of planned behavior predictors of faculty members' intentions to refer students with mental health concerns. Additionally, the variables were identified and driven by sound theoretical foundations of the theory of planned behavior (Azjen, 1991). This study expanded on previous literature presented by examining faculty referral intentions and using the theory of planned behavior as a framework for expanding college students' mental health literature.

Implications for Theory

Based on the theory of planned behavior (Azjen, 1991) it can be seen likely that faculty members' intentions to refer students with mental health concerns to a mental health professional may be impacted by their attitudes, subjective norms, and perceived behavioral control. Using the TPB as the conceptual framework for this study allowed for exploration of the belief-based predictors of faculty intentions to refer students. The results of the study suggested the belief-related predictors (attitudes, subjective norms, and perceived behavioral control) of the theory of planned behavior accounted for 52% of the variance of the intention to refer students. Further analysis revealed that perceived behavioral control ($\beta = .119$, $p > .05$) did not significantly predict intention to refer; however attitudes ($\beta = .336$, $p < .001$) and subjective norms ($\beta = .375$, $p < .001$) did predict intention to refer students to mental health professionals. Despite this finding being inconsistent with Lee (2014), Servaty-Seib et al. (2013), and Schwartz (2010) who all found perceived behavioral control to contribute to the intention to refer; the model did explain 52% of the variance of faculty intentions to refer. Therefore, the predictive model validates the theory of planned behavior as a useful tool to assess faculty intentions to refer students.

This study was the first to investigate faculty members' intentions to refer students using the theory of planned behavior constructs. It expanded upon the previous theory of planned behavior research by extending what is known about referral intentions and applying it to higher education faculty members' referral intentions. Future researchers should replicate this study to validate the theory of planned behavior regarding faculty members' intentions. Additionally, replication would further examine if all three belief-related predictors (attitude, subjective norms,

and perceived behavioral control) significantly predict intentions to refer or if only individual constructs predict intentions. Further research should also investigate the validity of the theory of planned behavior with expanded populations beyond faculty members from a single, Midwestern university.

Implications for Future Research

This research study adds to the existing literature regarding college students with mental health concerns. It is the first quantitative study exploring faculty beliefs about referring students to mental health professionals; therefore, there is much more to be learned in this area of study. My results support the theory of planned behavior as a useful tool to examine faculty members' beliefs and justifies further research to expand upon the current findings of the study.

I examined faculty members from a single, Midwestern four-year university. The sample was not representative of all faculty members; therefore, the generalizability of the findings must be viewed carefully. In future research, it would be interesting to replicate the study with faculty from differing geographic regions, demographics, and institutional types. Doing this would increase the sample size and possible generalizability of faculty referral intentions of students with mental health concerns.

Another area of future research is to use qualitative methods and longitudinal design to study faculty intentions to refer students to mental health professionals. Face-to-face interviews could be conducted with faculty about their referral intentions to gain a better understanding of their underlying beliefs. Longitudinal studies could be conducted to examine faculty over time to assess their underlying beliefs. A delimitation of the study was the inability to further explore faculty responses to questions on the theory of planned behavior questionnaire. In interviews,

faculty would have the opportunity to expand on responses to questions that were answered with "neither agree or disagree". Qualitative methodology and longitudinal studies may provide more rich, thick descriptions of faculty underlying beliefs regarding referral intentions.

Future research could use structural equation modeling rather than multiple linear regression to assess faculty intentions to refer students using the TPB. Using multiple linear regression analysis I assessed the predictive ability of the independent variables to the dependent variable of intention to refer. Future scholars may want to use structural equation modeling to assess the overall conceptual model (Field, 2013).

The results of my study revealed faculty from math and computer science disciplines significantly less likely to refer students. Additionally, knowledge of mental health concerns from professional, family, friends, and coworkers experience with mental health concerns are significant predictors of intentions to refer students. These findings justify further research with larger populations to see if similar results can be replicated and supported. There were only 7 faculty from math and computer science disciplines in my study, so increasing the sample size may result in different findings.

In this study, 78.5% of faculty respondents have referred a student in the past to a mental health professional and only 21.5% have never referred a student. I would be interested in knowing of those students who had been referred, how many actually followed through with the referral and saw a mental health professional? What led a student to comply with the referral? If a student did not follow through and seek help, why did they not comply? What factors or underlying beliefs of students prevent them from acting on the referral? Lastly, how do faculty

underlying beliefs compare to students' underlying beliefs about referrals to mental health professionals?

As seen from the literature, gatekeeper training has been shown to be effective at increasing knowledge and skills of attendees (Isaac et al., 2009; Pasco et al., 2012). Further research can use the findings of my study and theory of planned behavior to assess gatekeeper training effectiveness. A pre-test and post-test could be developed to examine if gatekeeper training changed attendees' intentions to refer students. These findings could be used to design effective gatekeeper training curricula that increase the likelihood of referrals for students with mental health concerns.

Implications for Practice

The number of college students suffering from mental health concerns is increasing (American College Health Association, 2014; Hunt & Eisenberg, 2010). As the prevalence and severity of mental health problems increases, this puts higher education institutions under immense pressure (LaFollette, 2009). There is an increased need and focus on mental health services, awareness, and education at institutions (Kraft, 2011). A review of the literature and results of this study offers several recommendations for higher education practitioners.

University counseling centers are faced with increased pressures to meet students' mental health needs (Gallagher, 2014). Kitzrow (2009) found university counseling centers have been implementing creative ways to manage the demand and severity of problems: utilizing a brief therapy model, limiting the number of sessions, peer counseling, self-help groups, group therapy, and referrals to off-campus counselors. Although these recommendations are beneficial, university counseling centers still remain grossly understaffed to meet the numerous needs of the

campus community. Funding for university mental health services needs to become a priority for higher education institutions. With additional funding, staffing could increase to meet the demands and ease the pressures counseling centers currently face. Also, the functions of the counseling center including providing gatekeeper training could adequately be provided to the campus community as a whole.

Of faculty responses on my survey, 65.1% somewhat agreed, agreed, or strongly agreed they have the knowledge necessary to recognize mental health concerns and make a referral. Nevertheless, 25.5% indicated they strongly disagreed, disagreed, or somewhat disagreed having the necessary knowledge to identify and refer. Additionally, 66.5% somewhat agreed, agreed, or strongly agreed that they were aware of a number of places to refer students. However, slightly over one-fourth (29.6%) of faculty indicated they strongly disagreed, disagreed, or somewhat disagreed they were aware of a number of places to refer students. These findings show that some faculty felt they do not have sufficient knowledge of mental health concerns or awareness of resources. Faculty who are not familiar with campus mental health services are less likely to discuss concerns with students, convince students to seek help, and refer students to counseling (Becker et al., 2002). Therefore, increasing education efforts towards faculty about mental illnesses and campus resources increase the likelihood of referrals.

Gatekeeper training is the most common used education strategy on college and university campuses to identify and intervene with at-risk students (Davidson & Locke, 2010). Mitchell et al. (2013) encourage all members of the campus community to receive gatekeeper training to recognize signs of mental health concerns, become aware of campus and community resources, and learn the skills needed to help students find appropriate services. According to

the results of my study, faculty indicated their preferred formats for education were workshops (64.4%), followed by written literature (53.7%). This suggests education through gatekeeper trainings on the topic of mental health concerns is an ideal format for faculty members. Providing gatekeeper training to faculty members can help in identifying at-risk students and assisting them in receiving early mental health treatment (Yufit & Lester, 2004).

Wallack et al. (2013) developed a five-step strategic planning model to guide college and university administrators how to effectively implement a campus gatekeeper training program. The five-step model includes: "assessing campus culture, assessing campus resources, selecting a training program, preparing the campus, and establishing and evaluating programmatic goals" (p. 28). It is crucial thoughtful planning be done prior to implementing a gatekeeper training program. Campus resources and culture need to be consistent with the gatekeeper program. Additionally, higher education administrators must encourage gatekeepers, such as faculty members to recognize signs of mental health concerns and offer referrals to counseling when needed. Also, it is important to understand what underlying factors may play a role in faculty intentions to refer students to a mental health professional to maximize the potential effectiveness of gatekeeper training, which justified the need for this study.

The literature supporting the theory of planned behavior (Azjen, 1991) showed faculty referral intentions may be impacted by their attitudes, subjective norms, and perceived behavioral control (Carr, 2011; Lee, 2014; Servaty-Seib et al., 2013). Using the TPB as the conceptual framework for this study allowed me to explore the belief-based predictors of faculty intentions to refer students to mental health professionals. The results of this study did not find perceived behavioral control to be a significant predictor, but faculty attitudes and subjective

norms were significant predictors of the intention to refer. These findings suggest gatekeeper training for faculty should address not only knowledge and skills, but also faculty attitudes and subjective norms. Additionally, it would be important for trainings to stress how important others would approve of faculty referring students of concern (subjective norms). Educators and gatekeeper trainers can use these results to design curricula that will better prepare faculty and increase the likelihood of faculty to refer concerning students.

It is important on college campuses to create an environment of inclusion for students with mental health concerns; otherwise stigma and discrimination will persist. Fink (2014) found "supportive college environments, students' sense of belonging, professional confidence, and civic engagement" (p. 380) were predictors of positive student mental health. Findings also indicated environments that were non-inclusive and discriminatory created barriers for students to disclose and seek necessary help. Quinn et al. (2009) provided recommendations on ways higher education administrators could create a more inclusive and supportive environment for students with mental illness. Their suggestions included clearer policies, specific institutional procedures, gatekeeper training for staff/faculty/administrators, educating students, peer support system, anti-stigma initiatives, and linking mental and physical well-being. Many faculty do not feel they have clear policies about how to respond to distressed students (Schwartz, 2010). My findings showed faculty were evenly divided of awareness of campus guidelines and procedures to be followed when referring students. Despite almost half of faculty being aware of campus procedures, it is concerning to me another half of faculty are not aware of campus guidelines. This exhibits the need to inform faculty members of institutional policies regarding students with

mental health concerns. Clearer guidelines and procedures would create a more inclusive and supportive environment for students with mental illness (Quinn et al., 2009).

Creating inclusive campus environments would support students to attain their educational and individual goals. It would also reduce the harmful impact of stigma and discrimination that marginalizes students with mental health problems (Martin, 2010). Therefore, it is essential higher education administrators support campus professionals including faculty members, to identify students with mental health concerns and refer them to mental health professionals to create inclusive campus environments.

Conclusions

The purpose of this study was to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional. Using the theory of planned behavior (Azjen, 1991) as the conceptual framework for this study allowed for exploration of three belief-based predictors: attitudes, subjective norms, and perceived behavioral control. I also investigated if there were significant differences between faculty members' rank, academic discipline, years of teaching experience, sources of mental health knowledge, gender, age, and race regarding intentions to refer students. The findings of the study revealed faculty members' attitudes and subjective norms were significant predictors of intentions to refer students with mental health concerns to mental health professionals. Additionally, faculty with knowledge of mental health concerns from professional, family, friends, and coworkers experience with mental health concerns were significant predictors of intentions to refer students. Lastly, faculty from math and computer science disciplines were significantly less likely to refer students with mental health concerns than faculty from other

academic disciplines. There were no significant differences in intentions to refer students based on faculty members' age, gender, race, academic rank, years of teaching experience, or perceived behavioral control.

Additional findings of the study indicated that although the majority of faculty have referred a student in the past, some faculty are not knowledgeable about mental health, lack awareness of campus guidelines and procedures, and are unaware of campus referral sources. Overall, faculty desire information about mental health concerns and prefer workshops for the education. These results showed education through gatekeeper trainings being an ideal format for faculty members. In addition, this study's findings suggest gatekeeper training for faculty should address not only knowledge and skills, but also faculty attitudes and subjective norms. It would be important for trainings to stress how important others would approve of faculty referring students of concern (subjective norms). Educators and gatekeeper trainers can use these results to design curricula that will better prepare faculty and increase the likelihood of faculty to refer concerning students.

By detecting these predictors higher education administrators can better prepare faculty to identify and refer students to seek counseling. Identifying and connecting students to needed mental health services will improve campus communities. It will also reduce barriers for college students suffering from mental illness and increase the likelihood of academic success.

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Appendix A

TPB Questionnaire Use Approval

Servaty-Seib, Heather L <servaty@purdue.edu>
Monday, February 1, 2016 at 7:09 AM
To: Tye, Jessica
(Attachment A) online pre-test.docx (35.1 KB) Preview

Dear Jessica,
I would be glad to help.
My only concern is that based on TpB best practices--it would be best for you to create your own quantitative survey--based on qualitative data from your target group on your own campus--so faculty at St. Cloud.
With that said, I am attaching our pre-post test for RAs so that you can see all of the measures that we used.
Heather

-----Original Message-----
From: Tye, Jessica [redacted]
Sent: Thursday, January 28, 2016 5:41 PM
To: Servaty-Seib, Heather L <servaty@purdue.edu>
Subject: Permission to use TpB Questionnaire

Dr. Servaty-Seib,

I am a doctoral student in the Higher Education Administration Program at St. Cloud State University currently working on my dissertation. I have read your publication: Using the Theory of Planned Behavior to Predict Resident Assistants' Intention to Refer Students to Counseling. I am contacting you to seek permission to use the TpB Questionnaire you developed for your research. I have included my problem statement to give you an indication of how I would use your survey in my research:

The purpose of my study is to identify belief-based predictors (attitudes, subjective norms, and perceived behavioral control) of faculty members' intentions to refer students with mental health concerns to a mental health professional.

* Do I have your permission to use the TpB Questionnaire for my dissertation?
* Do you have any objections to my doing slight adjustments to the survey to fit my study population of faculty members and students with mental health concerns?
* In the article it is noted the TpB has been shown to have good psychometric properties. Do you have data on the validity and reliability of your survey, so that I may document that in my dissertation?
* Lastly, are you aware of any other researchers or dissertators who have used your TpB Questionnaire? Or with college faculty members?

Thank you for your consideration of my request.
Sincerely,

Jessica Tye

Appendix B

TPB Questionnaire (Modified)

This survey is designed to help understand faculty intentions to refer students with mental health concerns to a mental health professional.

Individuals with ***mental health concerns*** refers to those with less than optimal mental health, which put one at high risk for developing a mental health diagnosis.

Indicators of mental health concerns are signs or symptoms students may exhibit. Possibly indicators faculty may observe include: depressed mood, withdrawal, diminished friendliness, diminished ability to think, loss of interest, excessive irritability/rage, talking or writing about alarming content, emotional outbursts, major change in appearance, hopelessness, intoxication, diminished academic success, repeat absences, suspiciousness, confused thinking, rapid/slurred speech, stalking/harassing, physical violence/threats, and expressions of concerns from peers

Referring includes any behavior that involves connecting a student to a mental health professional, such as speaking with a student about the options of seeking services, encouraging a student to schedule an appointment, providing a student with the contact information, or going with a student to a mental health provider's office or campus counseling services.

A ***mental health professional*** is any professional trained to address mental health concerns, such as psychiatrists, psychologists, clinical social workers, and counselors.

Section A

Please respond by clicking the circle that best describes the way <u>you feel</u> about referring students to a mental health professional that you suspect of having mental health concerns.

For me, referring a student with mental health concerns to speak with a mental health professional is

1.	Worthless	1----------2----------3----------4----------5----------6----------7	Valuable
2.	A Strength	1----------2----------3----------4----------5----------6----------7	A Weakness
3.	Pleasant	1----------2----------3----------4----------5----------6----------7	Unpleasant
4.	Good	1----------2----------3----------4----------5----------6----------7	Bad
5.	Harmful	1----------2----------3----------4----------5----------6----------7	Beneficial
6.	Difficult	1----------2----------3----------4----------5----------6----------7	Easy
7.	Brave	1----------2----------3----------4----------5----------6----------7	Cowardly
8.	Uncomfortable	1----------2----------3----------4----------5----------6----------7	Comfortable
9.	Responsible	1----------2----------3----------4----------5----------6----------7	Irresponsible
10.	Simple	1----------2----------3----------4----------5----------6----------7	Complex
11.	Safe	1----------2----------3----------4----------5----------6----------7	Unsafe

Section B

Please respond by clicking the circle that corresponds to your level of agreement or disagreement with the following statements:

12. The individuals I work with (e.g., faculty, administrators, and staff) *expect* me to refer a student with mental health concerns to speak with a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

13. People in my life who are important to me would *expect* me to refer a student with mental health concerns to speak with a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

14. The individuals I work with (e.g., faculty, administrators, and staff) would *approve* of my referring a student with mental health concerns to speak with a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

15. People in my life who are important to me would *approve* of my decision to refer a student with mental health concerns to speak with a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

16. It is my professional obligation to refer students with mental health concerns to speak with a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

Section C

17. For me to refer a student with mental health concerns to speak with a mental health professional is:

Easy 1----------2----------3----------4----------5----------6----------7 Difficult

18. I am *not* confident that I could refer a student with mental health concerns to a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

19. Whether I refer a student with mental health concerns to a mental health professional is entirely up to me.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

20. I am aware of a number of places where I could refer a student with mental health concerns to a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

21. I am aware of the campus guidelines and procedures to be followed to refer a student with mental health concerns to a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

22. I have the knowledge necessary to recognize mental health concerns in students and make a referral to a mental health professional.

1----------2----------3----------4----------5----------6----------7
Strongly disagree Strongly agree

Section D

23. I aim to refer students suspected of having mental health concerns.

1----------2----------3----------4----------5----------6----------7
Unlikely Likely

24. I will try to refer students suspected of having mental health concerns.

1----------2----------3----------4----------5----------6----------7
Unlikely Likely

25. I intend to refer students suspected of having mental health concerns.

1----------2----------3----------4----------5----------6----------7
Unlikely Likely

Section E

26. Have you ever referred a student with mental health concerns to a mental health professional?

- o Yes
- o No

27. From which of the following sources have you obtained knowledge about mental health concerns? (check all that apply)

- o Formal education/training
- o Gatekeeper training/workshops
- o Personal experience with mental health concerns
- o Family, friends, and coworkers' experience with mental health concerns
- o Professional experience
- o Media (TV, radio, newspaper, magazines, books, internet)
- o Other. Specify: _____

28. If you desire information about mental health concerns, what formats do you prefer? (check all that apply)
    - Workshop (conference, faculty development training)
    - Written literature
    - Talking to a specialist
    - Online trainings/videos
    - Other: _____

29. What is your faculty rank?
    - Full Professor
    - Associate Professor
    - Assistant Professor
    - Instructor
    - Adjunct
    - Other _____

30. Within which academic discipline is your primary faculty appointment?
    - Social Sciences (Political Science, Psychology, Social Work)
    - Natural Sciences (Biology, Chemistry, Physics)
    - Math and Computer Sciences
    - Humanities (English, Philosophy, Religion, History)
    - Arts (Theater, Music, Visual Arts)
    - Education
    - Business and Finance (Accounting, Economics, Marketing)
    - Engineering
    - Health Sciences and Medicine (Nursing, Physical Therapy, Sports Medicine)
    - Other _____

31. For how many years post-graduate training have you been teaching?
    - 0-5 years
    - 6-10 years
    - 11-15 years
    - 16+ years

32. What is your gender?
    - Male
    - Female
    - Other _____

33. What is your current age?
    - 20 to 24
    - 25 to 34
    - 35 to 44
    - 45 to 54
    - 55 to 64
    - 65 or over

34. What is your race? (Check all that apply)
    - White/Caucasian
    - African American/Black
    - Hispanic
    - Asian
    - Native American/Alaska Native
    - Pacific Islander
    - Other _____

Appendix C

SCSU IRB Approval Letter

ST. CLOUD STATE UNIVERSITY
EDUCATION FOR LIFE.

Institutional Review Board (IRB)
720 4th Avenue South MC 204K, St. Cloud, MN 56301-4498

Name: Jessica Tye
Address [redacted] USA
Email: tyje1301@stcloudstate.edu

IRB PROTOCOL DETERMINATION:
Exempt Review

Project Title: Predictors of Faculty Intentions to Refer Students with Mental Health Concerns to Mental Health professionals
Advisor Steven McCullar

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects. Your project has been: **APPROVED**

Please note the following important information concerning IRB projects:
- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).

- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.

-Exempt review only requires the submission of a Continuring Review/Final Report form in advance of the expiration date indicated in this letter if an extension of time is needed.

- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal is requested and approved, new consent forms will be officially stamped and reflect the new approval and expiration dates.

- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

If we can be of further assistance, feel free to contact the IRB at 320-308-3290 or email ri@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Institutional Official:

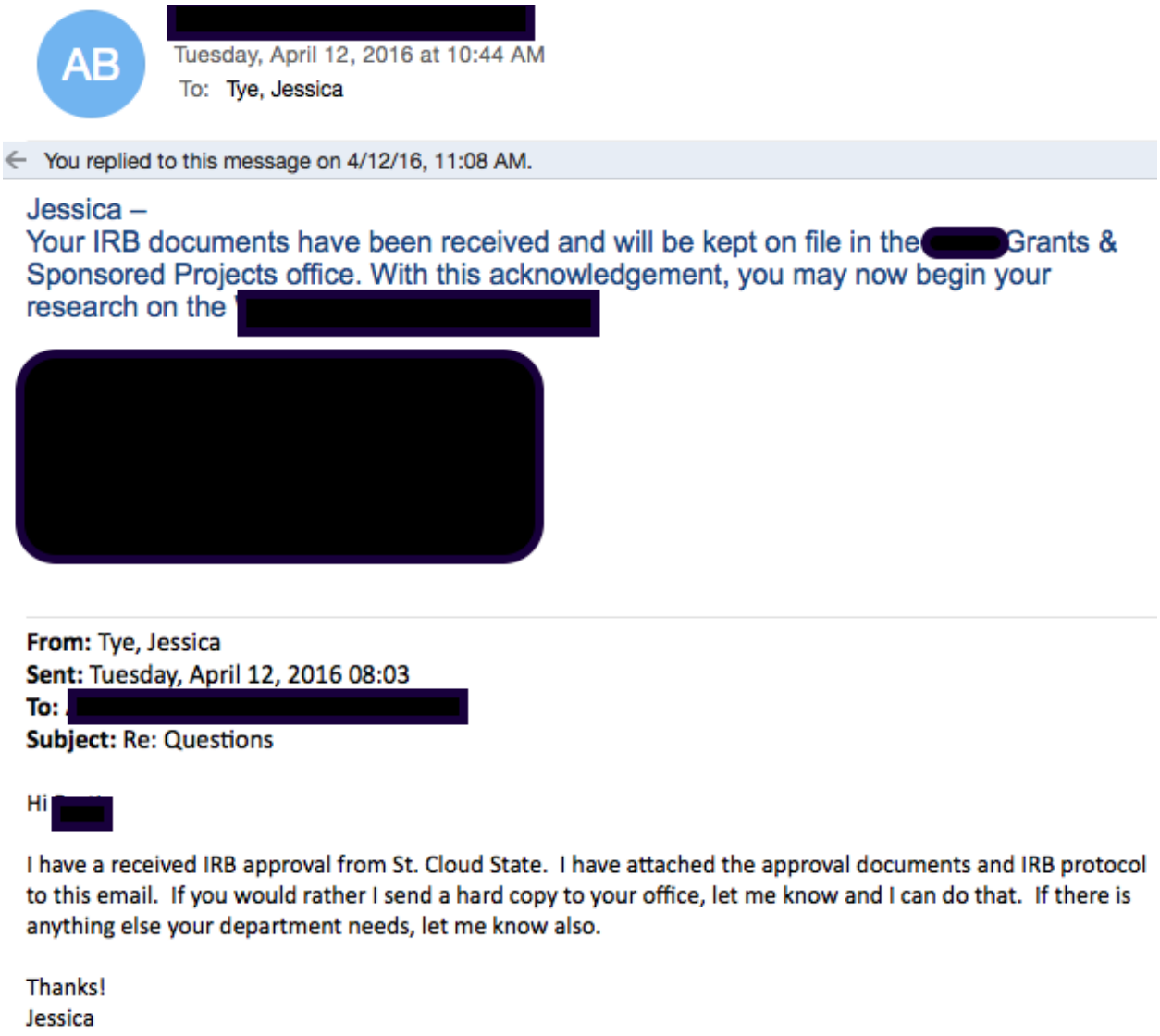
Dr. Marilyn Hart
Interim Associate Provost for Research
Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB# 1573 - 1965	**Type:** Exempt Review	**Today's Date:** 4/7/2016
1st Year Approval Date: 4/7/2016	**2nd Year Approval Date:**	**3rd Year Approval Date:**
1st Year Expiration Date: 4/16/2019	**2nd Year Expiration Date:**	**3rd Year Expiration Date:**

Appendix D

IRB Approval from other Institution



AB [redacted]
Tuesday, April 12, 2016 at 10:44 AM
To: Tye, Jessica

You replied to this message on 4/12/16, 11:08 AM.

Jessica –
Your IRB documents have been received and will be kept on file in the [redacted] Grants & Sponsored Projects office. With this acknowledgement, you may now begin your research on the [redacted]

[redacted]

From: Tye, Jessica
Sent: Tuesday, April 12, 2016 08:03
To: [redacted]
Subject: Re: Questions

Hi [redacted]

I have a received IRB approval from St. Cloud State. I have attached the approval documents and IRB protocol to this email. If you would rather I send a hard copy to your office, let me know and I can do that. If there is anything else your department needs, let me know also.

Thanks!
Jessica

Appendix E

Recruitment Email to Prospective Participants

Dear Fellow Faculty Member at [redacted],

My name is Jessica Tye and I am a doctoral candidate in the School of Education at St. Cloud State University and a fellow faculty member at [redacted]. I am conducting a research study about faculty intentions to refer students with mental health concerns. I hope the information gained will help design trainings and interventions to increase the likelihood of faculty to refer concerning students.

Faculty responses on this issue is very valuable and of critical importance to [redacted] and higher education institutions. I am emailing to ask if you would take about **5-10 minutes** to complete an online survey for this research project. Participation is completely voluntary and your answers will be anonymous.

If you are interested, please click on the link below for the survey and additional information:

http://www.linktoqualtricssurvey.com.

If you have any questions, please do not hesitate to contact me ([redacted]) or my advisor Dr. Steven McCullar (slmccullar@stcloudstate.edu).

I would greatly appreciate your participation in my study.
Thank you for your time.

Jessica Tye, MSW
Doctoral Candidate, Higher Education Administration Program
St. Cloud State University

Appendix F

Informed Consent Letter

Predictors of Faculty Intentions to Refer Students with Mental Health Concerns to a Mental Health Professional

Implied Informed Consent

You are invited to participate in a research study to determine faculty intentions to refer students with mental health concerns to a mental health professional. You were selected as a possible participant because you are a faculty member. This research project is being conducted by Jessica Tye, for a doctoral dissertation in the School of Education at St. Cloud State University.

Background Information and Purpose
The purpose of this study is to identify belief-based predictors of faculty members' intentions to refer students with mental health concerns to a mental health professional.

Procedures
If you decide to participate, you will be asked to complete a 5-10 minute online survey, which is completely anonymous so no one will be able to identify a specific individual's form. It is important that we have as many people as possible complete the survey to compile accurate representation.

Risks
There are no foreseeable risks associated with participation in this study. This project has been reviewed and approved by the St. Cloud State Institutional Review Board for the protection of human subjects.

Benefits
The questions on this survey were developed by reviewing research on college student mental health and identifying factors that influence faculty members' referral intentions. It is the hope that information gained will help design trainings and interventions to increase the likelihood of faculty to refer concerning students. Additionally, identifying and connecting students to needed mental health services will improve campus communities and academic success.

Confidentiality
Information obtained in this study is confidential and will be reported only as aggregated group results, with no more than 1-2 descriptors presented together. The survey is completely anonymous and no responses or demographic information could lead to identification.

Research Results
If you are interested in learning the results of the survey, upon completion my dissertation will be placed in the institutional repository at St. Cloud State University's Learning Resources Center.

Contact Information
If you have additional questions please contact the researcher at [redacted] or my adviser, Dr. Steven McCullar at (320) 308-4727 or slmccullar@stcloudstate.edu.

Voluntary Participation/Withdrawal

Participation is voluntary. Your decision whether or not to participate will not affect your current or future relations with St. Cloud State University, [redacted], or the researcher. If you decide to participate, you are free to withdraw at any time without penalty.

Acceptance to Participate

Your completion of the survey indicates that you are at least 18 years of age and your consent to participation in the study.

Appendix G

Follow-up Email

TJ

Tye, Jessica
Tuesday, April 19, 2016 at 7:53 AM
To: [redacted]

Dear Fellow Member of the [redacted]

Recently I sent a request to participate in an important survey of faculty referrals of students with mental health concerns. If you have already completed the survey please accept my thanks. If you have not completed the survey please take **5-10 minutes** to help with this very important research. I **need more** participants as faculty responses is very valuable to [redacted] University and higher education institutions.

If you are a faculty member whose assignment includes any instructional or teaching responsibilities, I am emailing to ask again if you would complete an online survey. Participation is completely voluntary and your answers will be anonymous. If interested, please copy and paste the following link into a web browser or click on the link below for the survey:

http://survey.az1.qualtrics.com/SE/?SID=SV_1YZ3ndFPj6Bnl4h

If you have any questions, please do not hesitate to contact me ([redacted]) or my advisor Dr. Steven McCullar (slmccullar@stcloudstate.edu). This project (IRB 1573-1965) has been approved by the St. Cloud State University Institutional Review Board.

I would greatly appreciate your participation in my study.
Thank you for your time.

Jessica Tye, MSW, LICSW
Doctoral Candidate
Higher Education Administration Program, St. Cloud State University
[redacted]